FREIGHT TRAFFIC ISSUE: THIS BULKHEAD CUTS FOOD DAMAGE p. 47

JULY 31, 1967

RAILWAY AGE

THE TRANSPORTATION WEEKLY

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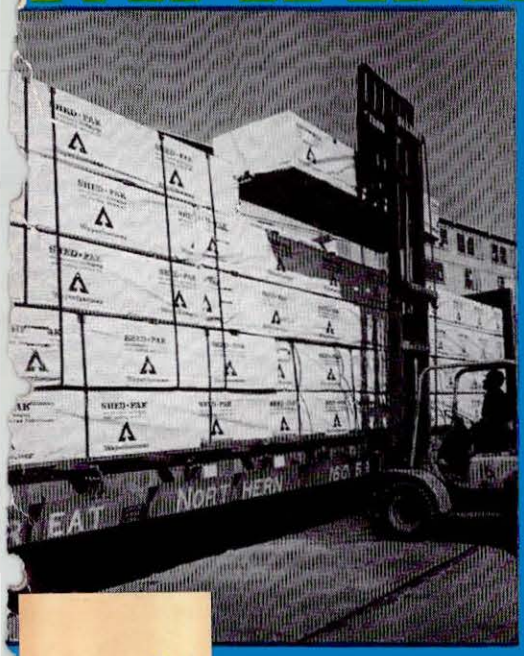

Great Northern: Ready to test new concepts

p. 30

NYC's Flexi-Flo: A case study of successful market research

p. 38

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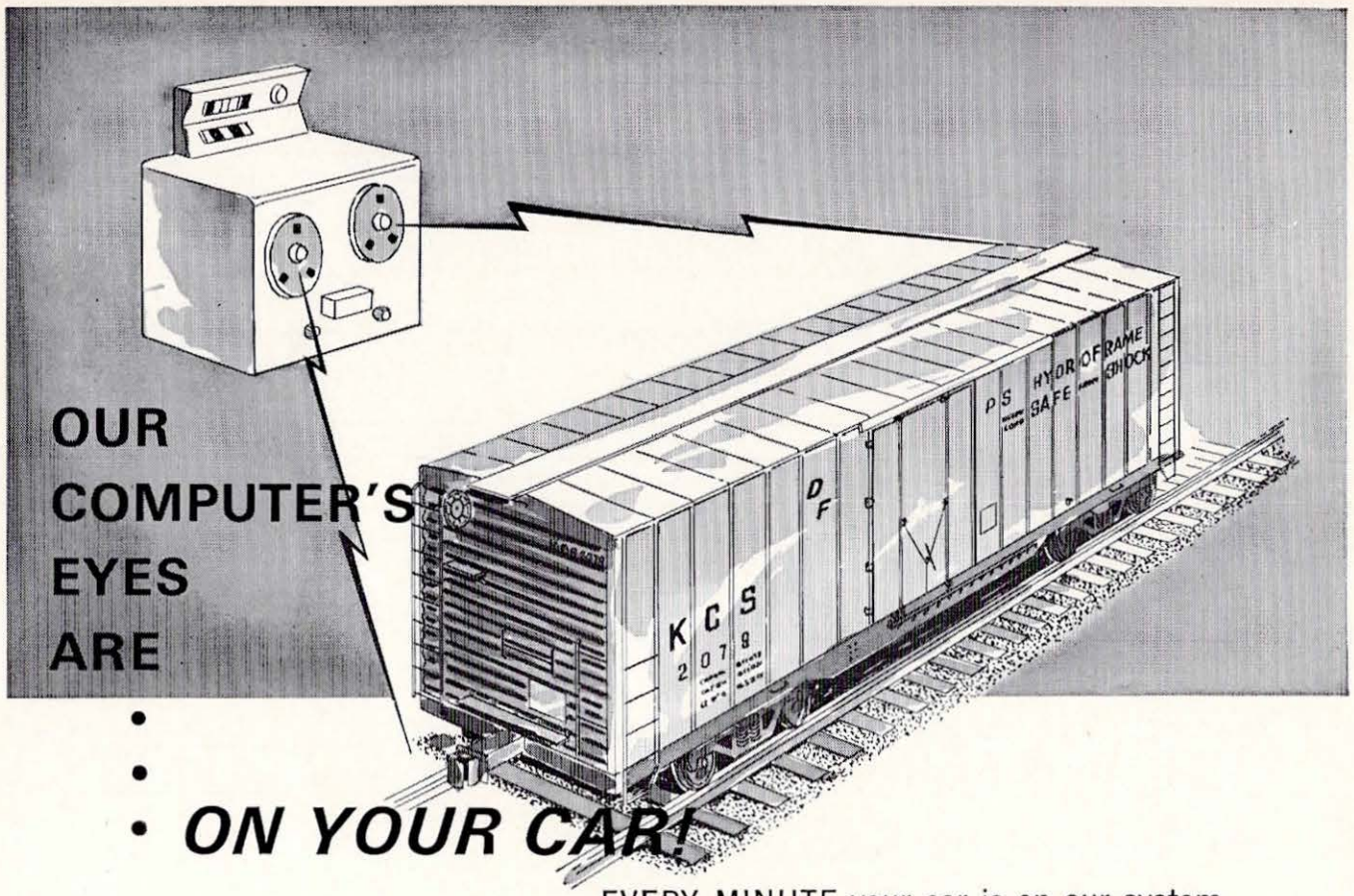

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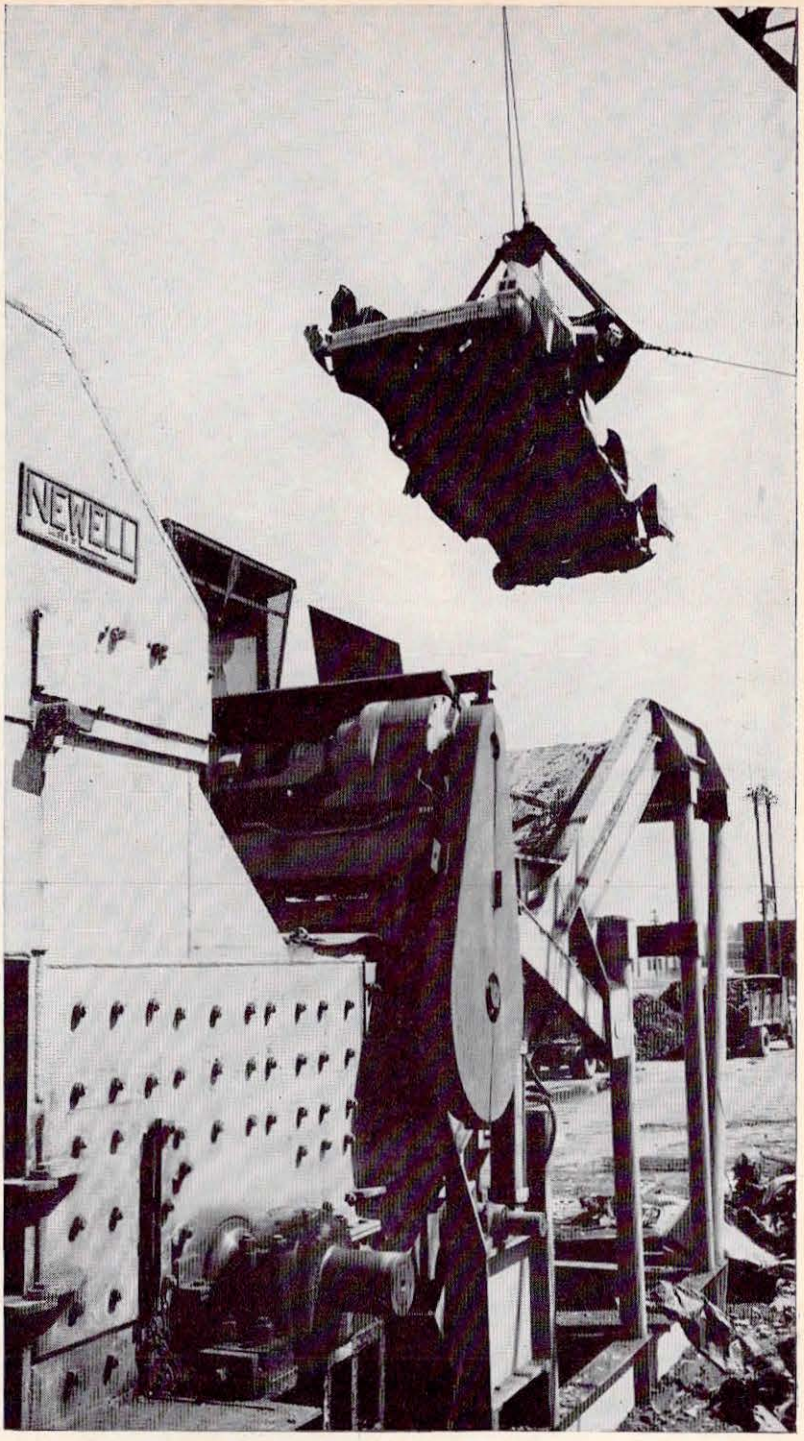

Down the chute she goes . . . into the 9½-ft-wide "mouth" of this unique car-shredding machine. A special hammer-mill arrangement shreds the stripped-down auto body and frame into fist-sized pieces of scrap. A vibrating belt then carries the shredded material to magnetic separators which sort out ferrous scrap for use as a steel making ingredient in electric and induction furnaces.

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ANCO nuts solve loose-bolting problem

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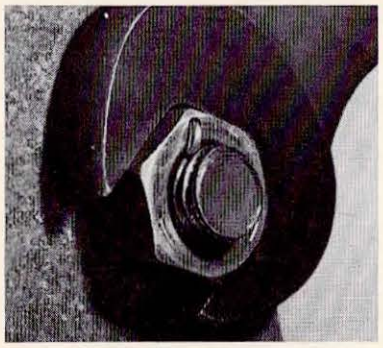

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A special steel locking pin acts as a ratchet, sliding along the thread as the nut is tightened. The point on the pin in contact with the bolt thread prevents loosening under shock or vibration. Sufficient leverage, however, can be applied with a hand wrench to reverse the direction of the pin for easy removal . . . without impairing the reusability of either the nut or the bolt.

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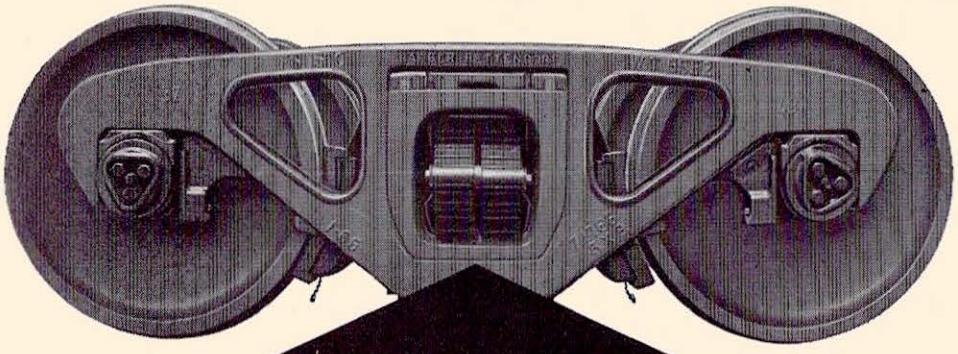

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RAILWAY AGE

July 31, 1967 • Vol. 163, No. 4

THIS WEEK

29 Passenger service: No influence on freight

Freight traffic routing is not affected by a railroad's passenger service, say nearly all respondents to this month's Traffic Poll.

30 GN is ready to test new marketing concepts

Here's how the road has begun a significantly more aggressive, more imaginative and better thought-out marketing effort.

38 Flexi-Flo: Case study in successful marketing

New York Central's combination of rates, service and equipment is bringing big gains in bulk-commodity traffic.

42 What's ahead for Far Eastern trade?

Milwaukee Road officers, recently returned from the Orient, tell how they think the import-export market will develop.

47 This bulkhead cuts food damage

Damage to fragile food products has been cut by more than 50% with an inflatable bulkhead developed by General Foods.

68 Viewpoint: Incongruous delays in Congress

Railroad men owe it to themselves and to their industry to see that Congress learns the facts of transportation life.

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New York, N.Y. 10007, 30 Church St.
Western Editorial Offices
Chicago, Ill. 60604, 14 E. Jackson Blvd.

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Washington, D.C. 20004,
National Press Bldg.
Washington Editor: Walter J. Taft

London, W.C. 2, England, 4, Talbot House; 98 St. Martin's Lane
International Editors:
Geoffrey Wilson John Levett

Contributing Editors:
Charles Layng
115 West Gore St.
Orlando, Florida 32806

E. L. Woodward
876 Chattanooga Ave.
Pacific Palisades, Calif. 90272

GEORGE DUSENBURY: Editorial Director

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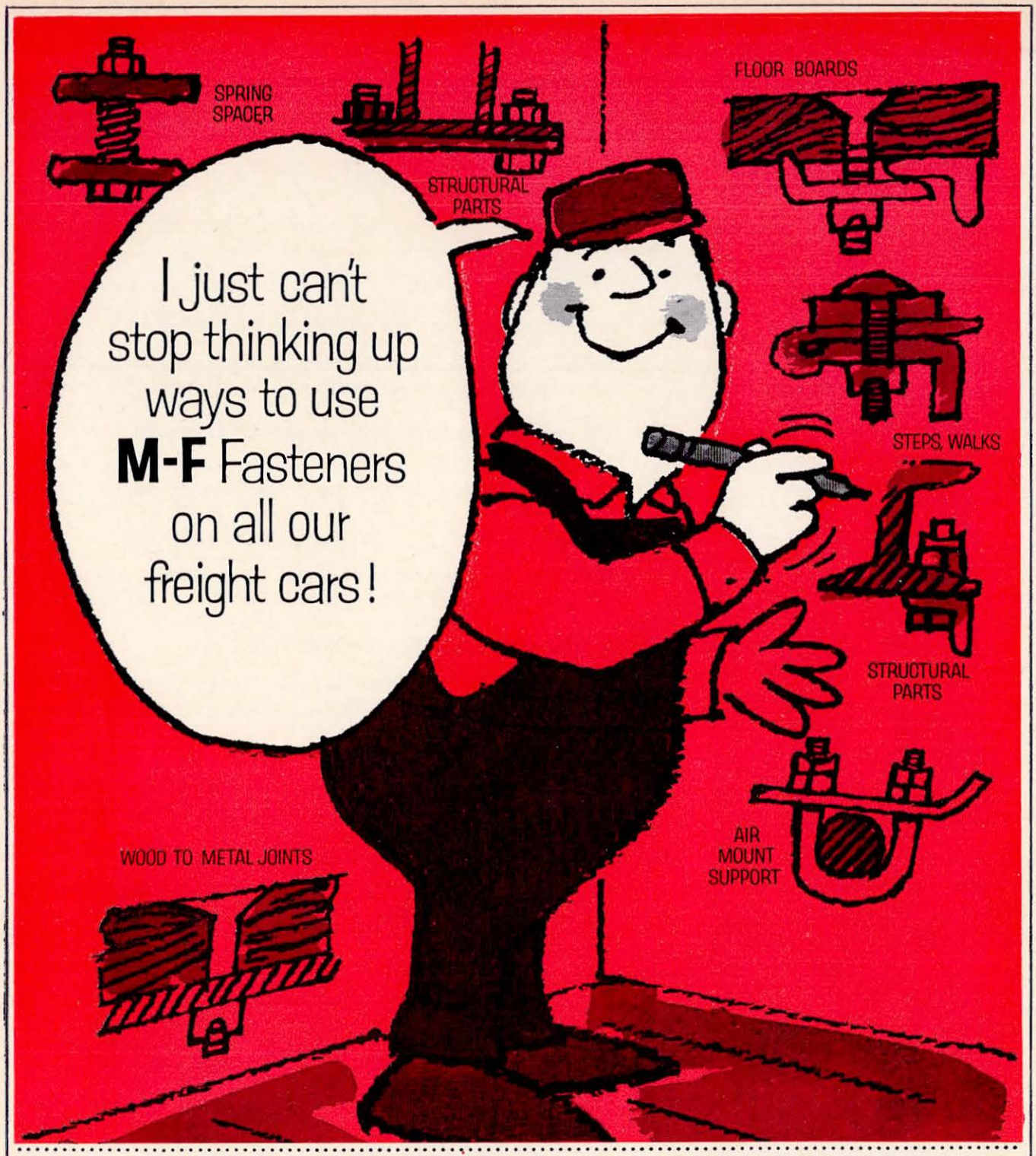
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SHORT AND SIGNIFICANT

Railroads' share of auto traffic climbs

Auto and truck manufacturers shipped 4.7 million vehicles in the first six months of this year—and the railroads handled 50% of them, according to the AAR. The 50% figure compares with 44% of the vehicle traffic shipped by rail in the corresponding period last year. Growth of the auto-rack traffic is attributed to the steadily growing capacity of the railroads to handle vehicles (the auto-rack fleet now totals 17,450 cars) and to low charges made possible by volume rail movement.

●

Truckers map a big merger

Presidents of three large trucking firms have agreed in principle on merger terms for creation of a single one that would be the second largest in the country. If negotiations are carried through, T.I.M.E., DC International and Los Angeles-Seattle Motor (the two former already have transcontinental routes, the latter has routes up and down the west coast) will form a single corporation with 37,000 miles of transcontinental routes.

●

Diesel fuels: New problems coming up?

With demand increasing for aviation fuels and gasolines, it's considered quite possible that railroads may soon find themselves adversely affected in the diesel fuel market, from a standpoint of both price and availability. Purchases and stores officers were told last week that prices are expected to strengthen, and several P&S men were already reporting certain supply difficulties, with quantities delivered falling below the quantities ordered. So far as the price situation is concerned, Shell Oil's H. D. Guthrie, manager of product economics and marketing noted that "exactly what will occur in diesel fuel prices is not known." But new refining technology is making possible conversion of distillate fuels to gasoline and aviation-grade fuel: Guthrie indicated that "Prices are expected to strengthen to the point where the differential in price between diesel fuel and gasoline is about equal to the relative capital and other manufacturing costs for the two products." Guthrie and other oil industry representatives spoke at a fuel seminar scheduled by the AAR P&S Division in Chicago.

●

Arbitration: This time it's voluntary

The railroads and five non-operating organizations are heading into arbitration, on a voluntary basis, of a dispute involving travel time and expense for employees required to work away from their home stations. Terms of the agreement provide for consideration of the case by a six-member panel, which is to begin hearings Aug. 8 and file its award before Sept. 26. The award is to become effective Oct. 15 and continue in effect until changed in accordance with Railway Labor Act provisions. Unions involved in the dispute are the Transportation-Communication Employees, Maintenance of Way Employees, Signalmen, Clerks, and Hotel & Restaurant Employees and Bartenders.

●

Central passenger service in peril

An agonizing reappraisal of New York Central passenger operations is in the making because of the Post Office decision to cut back drastically on use of RPO cars, NYC President Alfred E. Perlman warned. "The Central will lose $5.5 million of RPO car revenue annually," he said, and will further imperil passenger operations which produced a deficit of more than $16 million last year. The Post Office cutback on NYC lines began last April and will continue through September, with the big chop coming early in August. Perlman observed that while the Central "is continuing to study the market potential for a high-speed interurban service, the steady decline in passenger patronage and total passenger service may dictate a complete re-evaluation of our plans in this area."

MONDAY MORNING REPORT

Common carriers vs. a common threat

Every once in a while a cause will come along that will find traditionally opposing forces on the same side of the fence on an issue. Sometimes it has been the Hatfields and the McCoys against the revenuers, sometimes the cattlemen and the sheepmen against the Indians. And sometimes it has been the railroads and the truckers against a threatening third force. Last week, at hearings before a Senate subcommittee in Washington, it was the railroads and the truckers' turn again to saddle up together and ride out after some transportation rustlers that both industries view as a threat to their economic livelihood.

Some moonlighting in broad daylight

Cause of the trouble is the agricultural cooperatives that have been hauling freight—and not just agricultural commodities—with the resultant traffic loss to the common carriers. A number of farm co-ops have been making a habit of earning extra revenue by transporting non-farm commodities (everything from air conditioners to yarn) for non-members. The practice lets the co-ops eliminate empty back hauls for their trucks after deliveries of agricultural loads. The situation has become so serious, that in the words of AAR General Attorney Harry J. Breithaupt Jr., "Wholesale diversion from the regulated common carriers . . . is likely, indeed certain, to occur. The potential is there and the raiding has already started."

Putting legal reins on farm trucks

The farm co-ops can operate transportation for themselves under an exemption—Section 203(b)(5)—of the Interstate Commerce Act, which frees them of any control by the ICC. Consequently they can set charges as low as they like to attract traffic. The railroads, the truckers, the ICC the Transportation Association of America and others now want that exemption amended by legislation that would put some reins on the farm co-op trucks. Both the railroads and the truckers are unhappy with an amendment (S. 752) that has been proposed to limit the for-hire transportation by the cooperatives, deeming it inadequate. Nevertheless, they support it in principle. James F. Tinkney, chief counsel of the American Trucking Associations, believes the exemption for the co-ops should be more sharply defined. "It should limit any for-hire transportation by farmer cooperatives to the transportation of commodities handled by the cooperative, and farm-related traffic handled for their members—that is, commodities to be used in, or necessary for, or produced by, farming operations, and then only when such traffic is moving from or to farmers or agricultural cooperatives." The railroads also take this view.

A great temptation to dodge the law

Unless Congress acts, the railroads and other supporters of the remedial legislation believe, the exemption now available to bona fide agricultural co-ops is almost certain to encourage and spur the formation and use of spurious agricultural cooperatives as a means of evading ICC regulations. "Illicit transportation of this kind will surely increase," predicts the AAR's Breithaupt. "There is a much greater incentive or temptation, than heretofore for artifice, sham and deception."

Last week in Washington the railroads and the truckers hoped that they made their point to the lawmakers.

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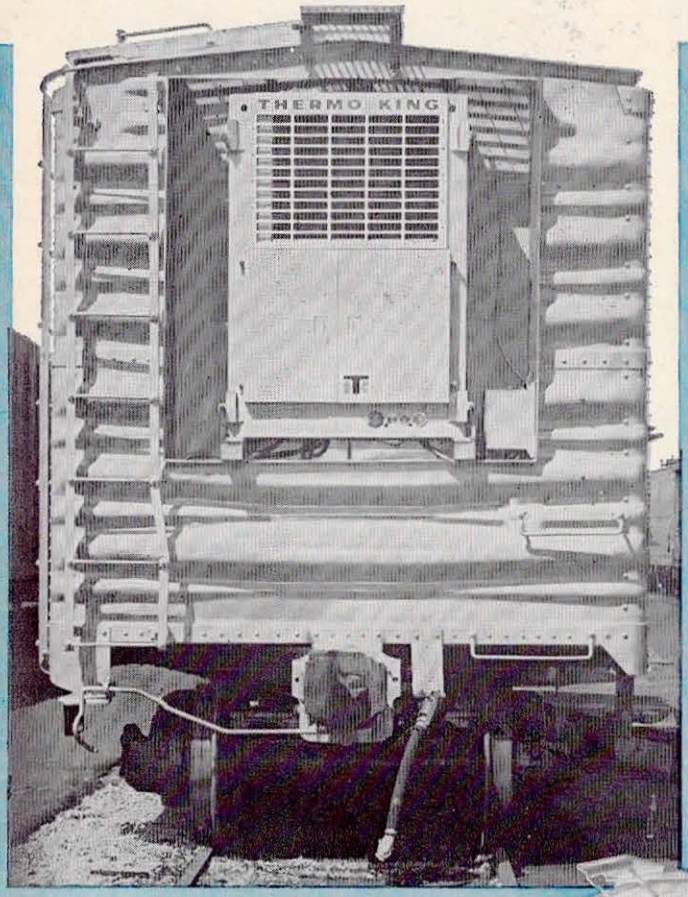

- Increases interior length from 33′ to 38′ to add 274 extra cubic feet in 40′ ice cars.
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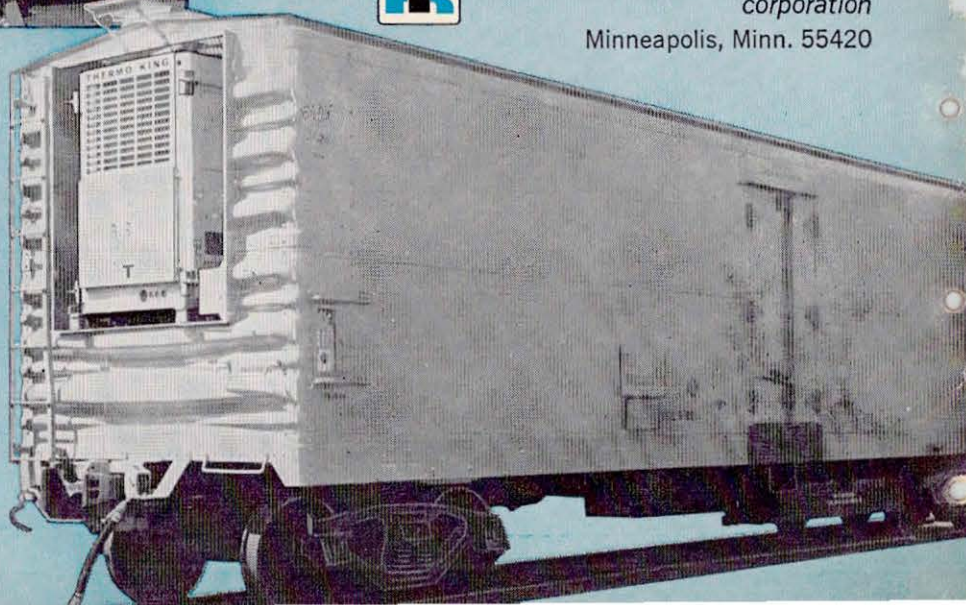

WEEK AT A GLANCE

Stormy weather in the second quarter

The second quarter financial statements are starting to come in from railroads and suppliers—and they're not calculated to bring smiles to the faces of stockholders. Following the general pace of the economy, profits are mostly down from the year-ago figures, and the sag that showed up on revenue charts in the first quarter continues.

The Southern showed a net income of $9 million, in the second quarter, down from $11.2 million in the comparable year-ago period. The first half tally was a net of $17.2 million, down from $17.9 million last year.

The Great Northern had a net income in the second quarter of $3.4 million—down from $10.9 million in the comparable year-ago period. The first half showing for GN was a net of $7.2 million, vs. $16.6 million in the first half of '66.

The Northern Pacific, even more severely hit, showed a net of $3.2 million in the second quarter, compared with $11.3 million a year ago; first half figures for NP are $5.5 million this year as against $13.9 million last year.

The Frisco's net income in the second quarter came to $3.32 million, down somewhat from last year's $3.37 million. First-half figures show Frisco's earnings in '67 as $5.76 million compared with $5.73 million a year ago—an overall gain for the half, and in fact an all-time high for net earnings by this road.

Erie Lackawanna, which made it into the black ink last year, slipped back into the red this year: The second quarter loss was $2.6 million compared to a profit of $3.8 million last year; the first half loss was $4.2 million compared to a $4.5 million profit last year.

New York Central showed a profit of $1.3 million in the first six months, compared with income of $25 million in the corresponding 1966 period. Central blamed the decrease on sharp declines in new auto and steel production, and on its own higher (1.3%) operating expenses during the period. A sunny spot in the picture is that Flexi-Van volume increased over the first half of last year to 80,817 units handled.

The Pennsylvania had a better showing in the second quarter of the year than the first—but the news was still not bullish. On a consolidated basis, the company reported net earnings of $15.5 million for the quarter, compared to $25.7 million in the comparable year-ago period. For the first half, the consolidated net earnings figures are $29.7 million in '67 and down from $41.2 million in '66.

Missouri Pacific showed an increase in the second quarter, but an over-all drop in the first half. Second quarter net: $8.5 million in '67 compared to $7.9 million in '66; in the first half, MoPac's earnings were $13.3 million, however, compared to $16.1 million in the first half of 1966.

. . . and it's hitting just about everybody

Pointing up the fact that it's the sluggishness of the economy and not simply the railroad industry that's in the doldrums, is the fact that rail suppliers, both the ones selling for the most part to railroads, and those that are highly diversified—are getting the same lumps, with few exceptions.

Timken Roller Bearings reported first half earnings of $21.7 million, down from $27.4 million in the comparable 1966 period. Stanray showed a first-half net of $837,000, compared to $1.08 million a year ago.

The steel companies, selling to many types of customers, registered sharp declines: U.S. Steel's first-half net earnings were $84.5 million, compared to $127.5 million a year ago. For the second quarter, earnings were $43.4 million compared to $77.4 million in the comparable '66 quarter.

Bethlehem Steel had a first-half net income of $66 million, down from $91.2 million a year ago. In the second quarter of this year, the net figure was $33.8, compared to $54.5 in the same period of '66.

Some firms managed to hold to the same range, and a few even increased their earnings. Ohio Brass registered a net of $2.35 million for the first half, compared with $2.28 a year ago. General Cable raised its first half net to $15.38 million, compared to $13.35 in the first half of 1966. American Machine & Foundry had a second-quarter net of $4.9 million, compared to $4.6 million a year ago. And General Telephone and Electronics was up in the second quarter to a net figure of $52.6 million, from $50 million in the comparable year-ago period.

Big ditch gets ditched—for now

The proposed Lake Erie-Ohio River Canal project has figuratively gone down the drain in the House with the elimination by the House Appropriations Committee of the necessary planning funds for the project. The Committee has also directed the Army Corps of Engineers to immediately terminate all planning work on the navigation phase.

Action by the House group came after receipt of a formal statement by Pennsylvania Governor Raymond P. Shafer that his state would not provide local cooperation. Gov. Shafer said the $1-billion project was "wholly devoid of merit."

The Appropriations Committee did approve $750,000 to continue planning of the Grand River reservoir portion of the project solely for purposes of flood control, water supply, water quality control and recreation and fish and wild life.

But the fight to ditch the big ditch may not be over. Observers in Washington point out that the Grand River project, if carried through to completion, would represent 30% of the original canal length—and serve as a lever to revive the campaign.

The Corps of Engineers had estimated that the project would cost the federal government $1 billion, with an additional $400 million to be put up by Ohio taxpayers.

GUS WELTY'S LINES ON LABOR

WELTY

HE LOOKS LIKE a rather mild-mannered accountant. When he makes a speech, you always expect it to end with "this . . . is . . . a . . . recording." Some people cuss him, some people call him a little Caesar. Most people stand in awe of the man and what he's done. He is, probably, the best known railroad man, to the general public, thanks to television, since Casey Jones. He's paid an excellent wage—but what he's taken out of the industry could never come close to equaling what he's given. He's James E. Wolfe—Doc Wolfe—and on Aug. 1 he turns over the top job in the National Railway Labor Conference, officially, to another solid citizen of the railroad business, John P. Hiltz Jr., former president and general manager of Delaware & Hudson.

DOC WOLFE didn't invent the "one man, one vote" concept. But at times, it must have seemed that he had—with his own theories as to the identity of *the* man with *the* vote. Personnel officers and presidents sometimes fumed. Doc did this and Doc did that—and, they said, all they knew was what they read in the papers. But no matter how much unofficial fussing there was, nobody ever really argued with what it was that Doc did. It was this simple: He did the job better than it had ever been done. He was the most effective labor negotiator the industry ever knew, and with results like those that Doc Wolfe got even railroad presidents could tolerate an eccentricity or two.

WHAT DID LABOR think about the most pesky antagonist the brotherhoods ever had? Without exception, Doc Wolfe has the respect of the men he dealt with. His word needed no backup. Union leaders were frequently in a state of absolute fury over what was happening to them—but, to the credit of all concerned, relationships among men suffered little. Among the ops, for example, resentment still runs high as a result of the "featherbedding" campaign, in both its advertising and its public relations aspects. But, from all indications, not a bit of this resentment has ever spilled over on the man who was actually going about the job of getting firemen out of the cab and chopping crew consists down to size.

FOR YEARS AND YEARS, railroads seemed to be giving the lie to the old bit that management acts and labor reacts. In railroading, labor demanded and management, often under strong government pressure, ran up the white-flag. In the work-rules controversy, though, management moved first — and had the backbone to stick out the messy fight. The credit belongs to the industry and its managers. And Doc Wolfe was the personification of that spinal stiffness. He'd have been a great guy to back, in the old days, in a card game on an old Mississippi River sternwheeler.

James E. Wolfe

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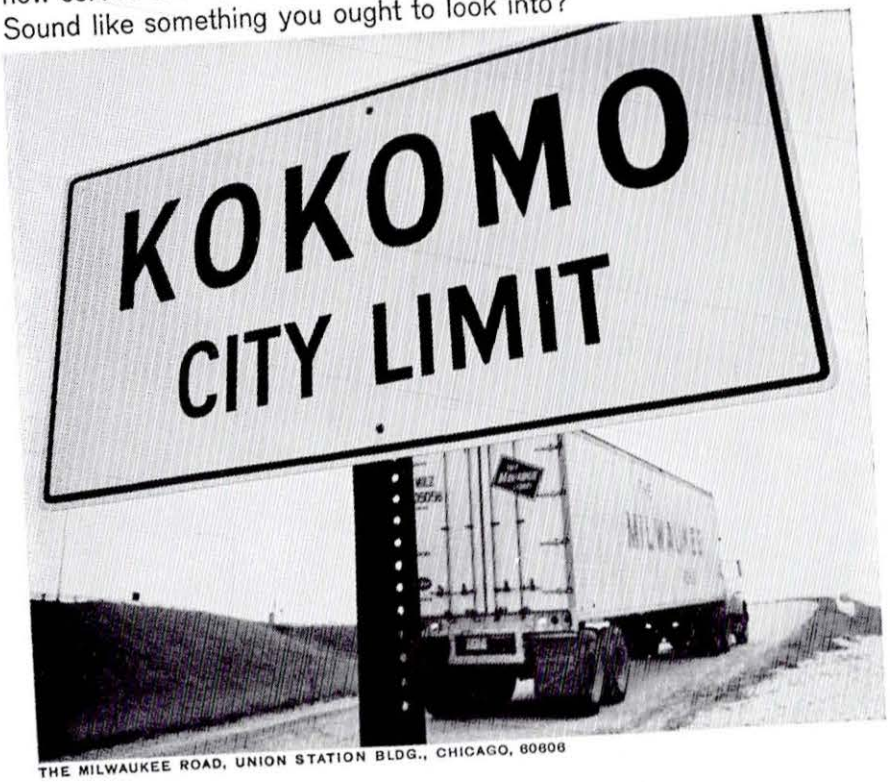

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These USS Tenelon Stainless Steel cars haul sodium chlorate to destinations from New Mexico to New England

Sodium chlorate is a crystalline salt and a strong oxidizer that requires special handling until it can go to work in an industry such as papermaking. That's why North American Car, Inc., directed AMF Beaird, Inc. (subsidiary of American Machine & Foundry Co.), Shreveport, La., to fabricate these new teardrop-shaped covered hopper car bodies of USS TENELON Stainless Steel. The shipper, American Potash and Chemical Corporation, ordered 23 more just like it. If they so desire, they can haul sodium chlorate one way and, on the return, haul a completely different chemical, without any fear of contamination. Why?

USS TENELON Stainless Steel can be cleaned in a whisk with a water hose. It's highly corrosion resistant, has a smooth, hard surface that provides no toe hold for foreign particles or bacteria, and is almost twice as strong as the conventional stainless steels. It requires no maintenance, and never needs to be painted. The quick turn-around time is a hit with shippers and railroads, because a USS TENELON Stainless Steel car makes more trips per year.

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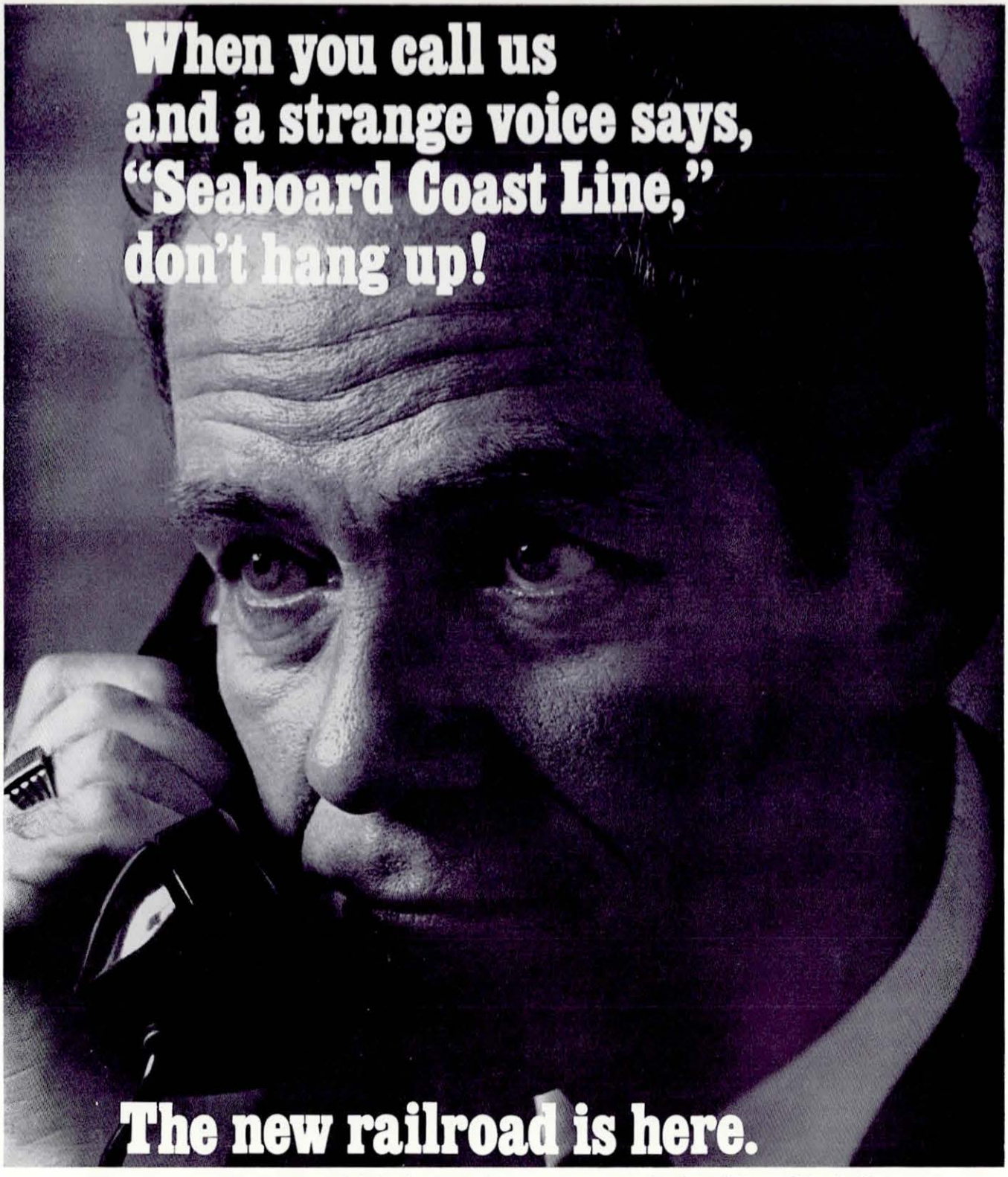
. . . durability

USS United States Steel: where the big idea is innovation



It's a fact. Seaboard and Atlantic Coast Line are now one: Seaboard Coast Line Railroad. We've merged to enable ourselves to better serve our customers—to provide them with even more services and more efficient ones. As we move toward full consolidation, we'll be combining many of our offices and other facilities. Should we change any addresses or phone numbers in your area, you'll be notified immediately so as to avoid any undue inconvenience in reaching us. So welcome aboard. The new railroad is here. And we're going to make it the best one that ever put train to track.

SCL SEABOARD COAST LINE RAILROAD

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Would you believe 43,959,542 cubic feet of capacity?

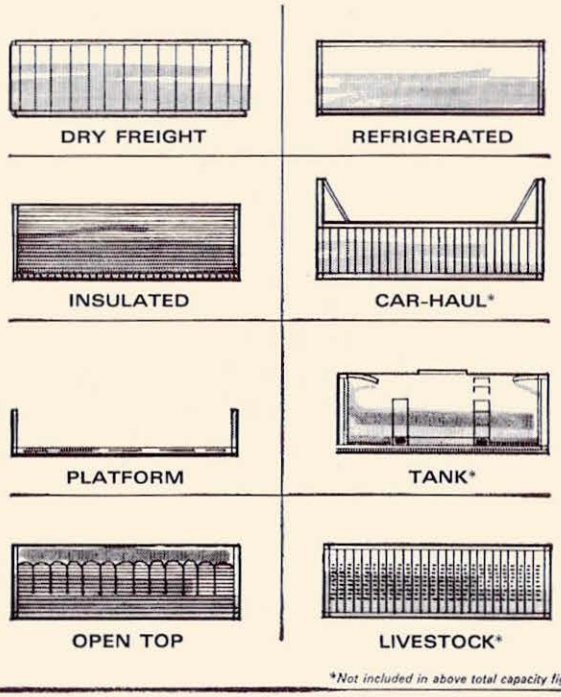
That's the total capacity of Fruehauf containers sold to date

Right from the start, shippers who pioneered in containerized freight handling have relied on Fruehauf experience and know-how for volume production of quality containers of all types . . . for the solution to varied shipping problems . . . for 'round the world service facilities. **Fruehauf Division, Fruehauf Corporation, Detroit, Michigan 48232.**

FRUEHAUF CONTAINERS

WAREHOUSING IN MOTION!

FRUEHAUF CONTAINERS MEET USASI STANDARDS, PROVIDE COMPLETE SHIPPING VERSATILITY.



*Not included in above total capacity figure.

U. S. Seaport Service Branches: Baltimore • Boston • Houston • Jacksonville • Kearny, N.J. • Los Angeles • Maspeth, Long Island • Miami • New Orleans • Norfolk • Philadelphia • Portland, Ore. • San Francisco • Seattle • Tampa • Complete container service facilities are also located at many inland Fruehauf Branches in the United States and Canada—as well as overseas.

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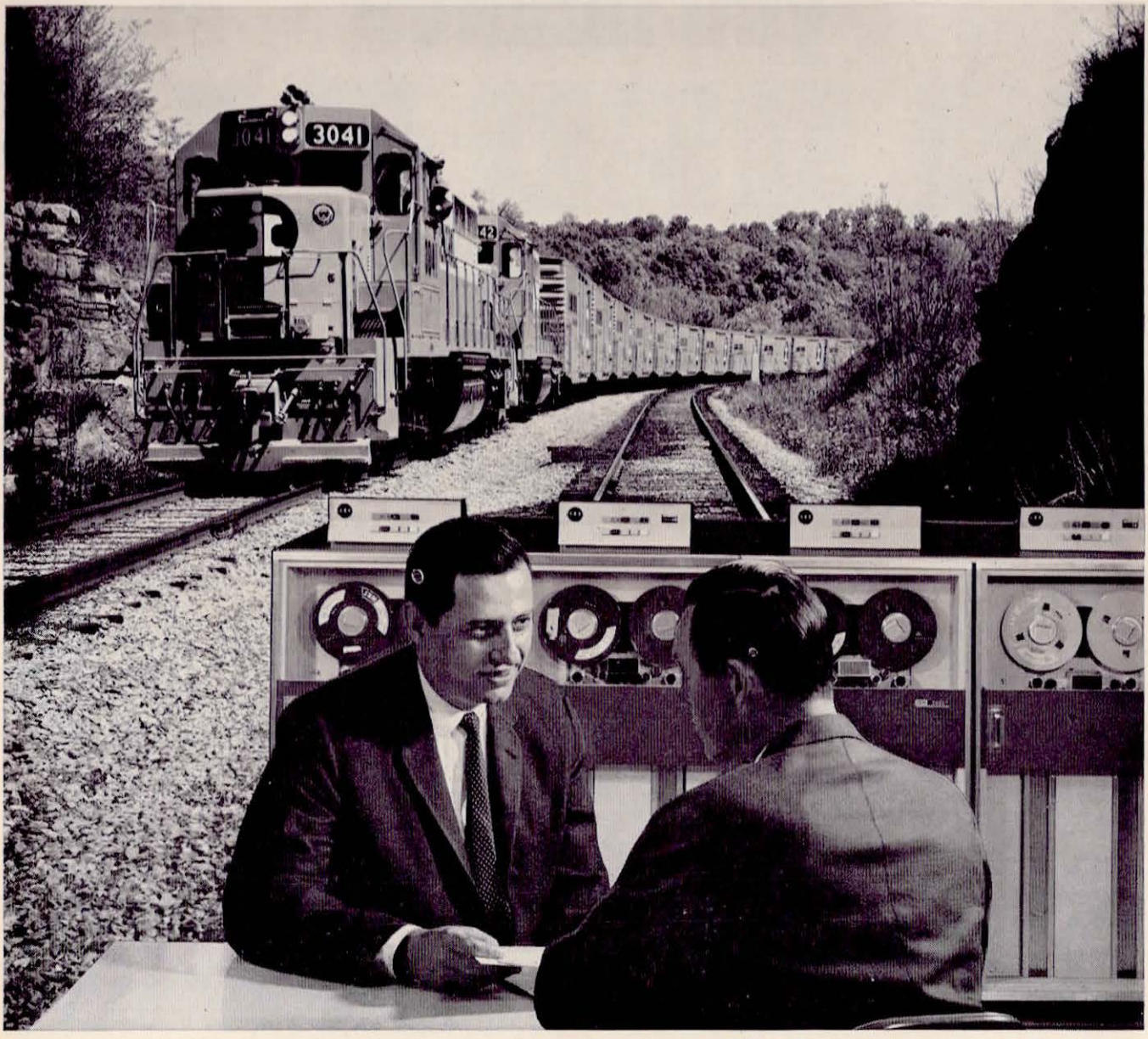
Do you qualify for "rent-a-train" low shipping rates?



This year we're putting $60 million into new equipment for shippers.

Ask BRAINFARE!

With distribution costs on the rise, shippers need to watch their pennies. The Illinois Central offers them all kinds of ways to save money. For instance, a shipper with a steady flow of high volume traffic may want to talk about his own train. That's one way he can profit from high utilization of equipment. It takes planning, which is BRAINFARE'S job. He may find that hiring even a small train can meet his market requirements. Our marketing research man (pictured above) contends that we can be your low cost carrier for distribution in Mid-America. He and his BRAINFARE team would like to prove it to you. Contact John W. Ingram, Asst. V.P., 135 E. 11th Place, Chicago, Illinois 60605. Phone 312-922-4811.

BRAINFARE is Illinois Central's new total warfare program against outmoded concepts of transportation. We've marshaled our best human and electronic brains into problem-solving task forces to zero in on your total distribution and marketing needs.

Main Line of Mid-America **ILLINOIS CENTRAL RAILROAD**

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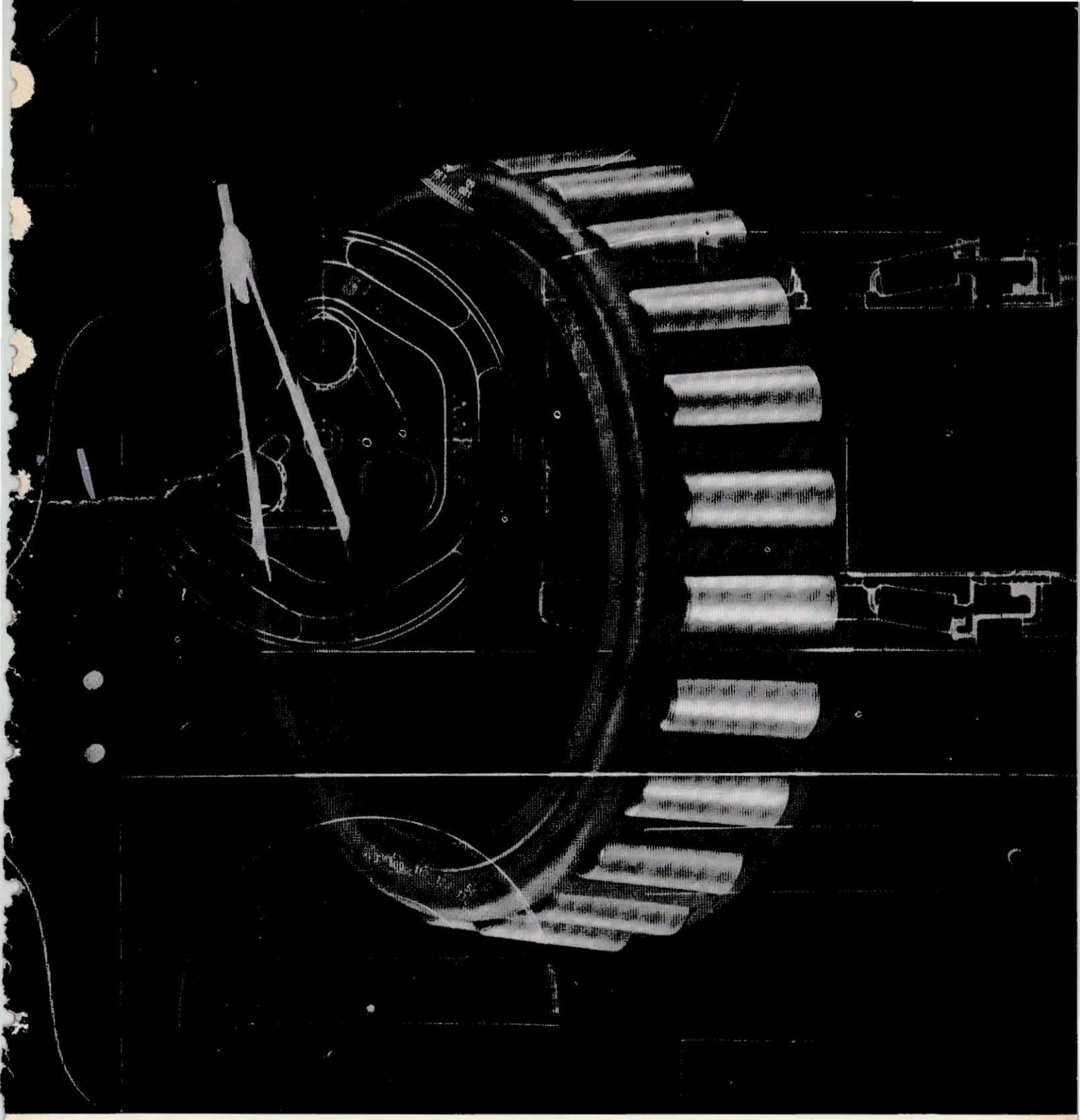
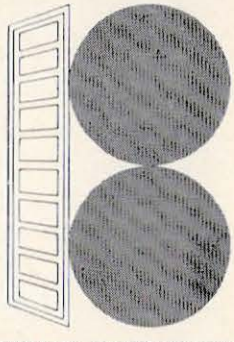


Precision-engineered by bearing specialists...

Brenco *crown-taper* roller bearings are the most modern of all.



BRENCO, INCORPORATED
PETERSBURG, VIRGINIA

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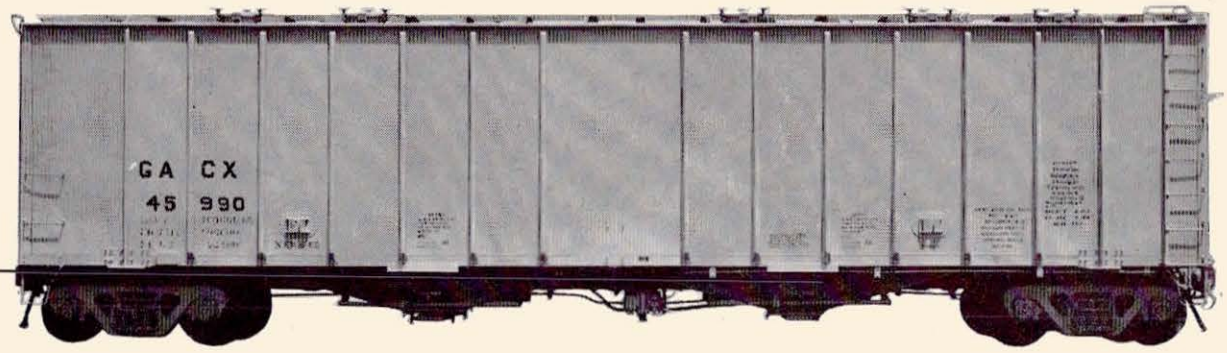
GATX PRESENTS

AIRSLIDE® CAR

IN "AIRSLIDE CAR RIDES AGAIN"

ENCORE! ENCORE!



Advance ticket sales are going on right now for the upcoming production!

GATX will be putting on a new production run of the famous Airslide cars, with the first showing slated for Fall, 1967.

You'll really enjoy the Airslide car's performance. It can unload starch, sugar, activated carbon, many chemicals and other finely divided dry bulk materials as fast as your conveying system can handle the product.

Fewer connections are required. Less spotting is needed. Car design affords complete product protection and sanitation. Low pressure air fluidizes the lading. It flows freely and without interruption.

Let the 4180 cu. ft. Airslide car perform as the star of your unloading operations. For additional information please call us, (Telephone: Area Code 312, 346-4100) or write to:

FREIGHT CAR DIVISION
GENERAL AMERICAN TRANSPORTATION CORPORATION
135 SOUTH LA SALLE STREET, CHICAGO, ILLINOIS 60690

GATX™

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Room with a 10,400-mile view

Here in the nerve center of the 10,400-mile Southern Railway System, specialists in railroad transportation can "see" at a glance everything affecting the movement of our trains as they go about the work of carrying freight and passengers throughout the Southern-served South.

The "right-now" intelligence available to these men for use in keeping our railroad moving comes from the largest centralized computer complex in the railroad industry... the nation's largest privately-used industrial microwave communications system... and the new technique of long-distance xerography, by which written documents fed into a machine at one point are copied simultaneously by machines hundreds of miles away.

Southern welded these mod-

ern miracles of technology into an interlocking system for instant communication of data to this central point where it can be put to immediate use with favorable effects upon railway-wide operations.

This is part of Southern's revolutionary approach to a kind of railroading that involves new and better ways to serve the South, 24 hours a day, every day of the year. And, to save people money on transportation costs.

D. W. Brosnan

PRESIDENT

Southern Railway System

WASHINGTON, D.C.

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LOOK AHEAD-LOOK SOUTH

For more information about the 10,400-mile view, write:
Customer Information
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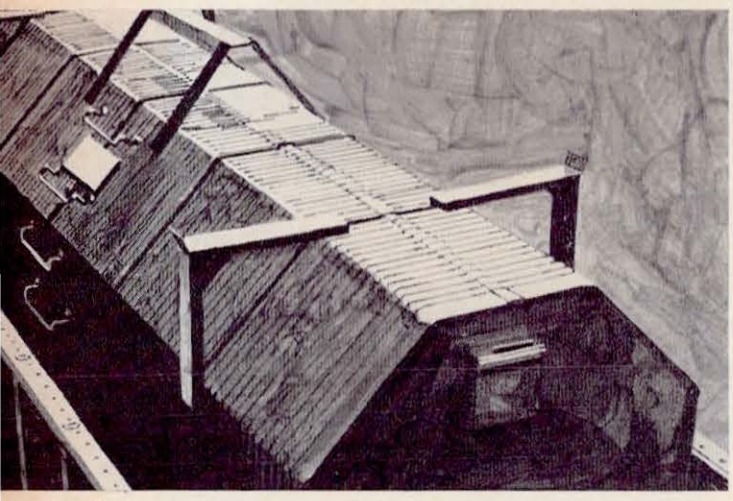
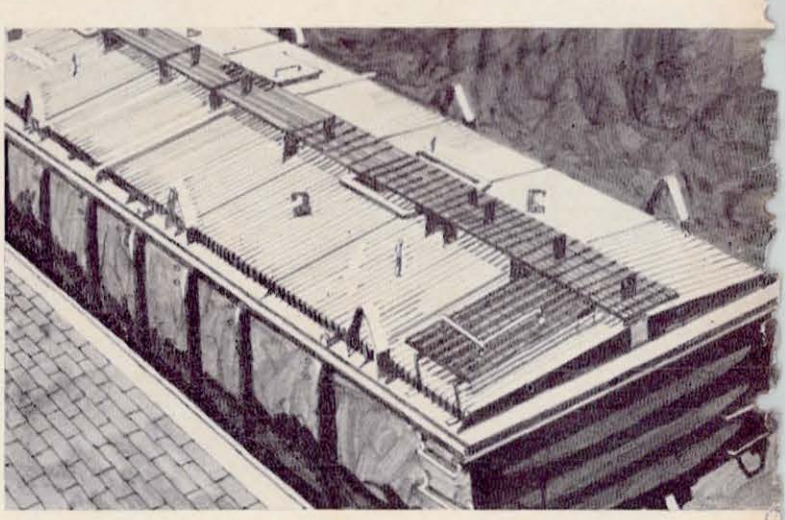
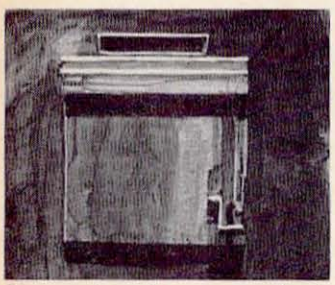
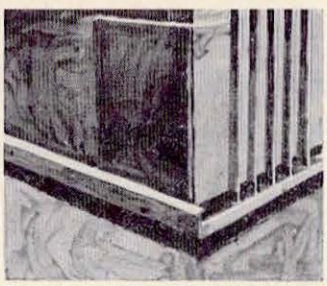
We designed these Republic coil covers as though they were going to protect our own steel coil.





They are. We know how buyers want their steel to show up. Because every day, shipments of steel roll into our warehouse to be fabricated into metal products. That's why we build coil covers big enough to cover 84″ diameter coils with details to keep the weather out. Downward sloping air vents at each end encourage air circulation but discourage rain from reaching the steel coils. And air circulation reduces condensation.

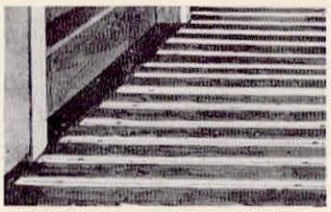




Inspection doors permit checks of cradle and hold-down devices without hoisting the cover. And extra strong corner reinforcing members protect Republic Coil Covers against accidental crane damage when you do lift the cover off.

We also have 3-section gondola covers that fit any standard gondola. Weather seals between adjoining sections keep everything inside dry, while clamps and centering pins hold covers in place during transit.

Write Republic Manufacturing Division for information and specifications. After all, you know how fussy you'd be if *your* shipment were being protected by your product.



Republic Freight Car Flooring makes blocking and bracing faster and easier. No hunting for narrow nailing slits, more than 27% of Republic's floor is nailable. Combination box structure and structural "Z's" give Republic Car Flooring a higher section modulus than any other car floor *and* lower weight.

This STEELMARK of the American Steel Industry on a product assures you it is modern, versatile, economical Steel. Look for it on products you buy.

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REPUBLIC STEEL CORPORATION
Youngstown, Ohio 44505

THE MAN FROM MANUFACTURING*

*A Trademark of Republic Steel Corporation

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MAINE CENTRAL RAILROAD

E. SPENCER MILLER, PRESIDENT
Maine Central Railroad Company

"Each week, every top Maine Central official reads Railway Age.

"It is his best means of being currently informed, with a minimum of time, on railroad developments in all areas including operations, engineering and technical developments and regulation. In addition to its articles and features, the excellent advertisements add to our knowledge of what other railroads are doing and what is new in improved products suppliers are offering.

"For us, Railway Age is indispensable."

E Spencer Miller

65
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2W CAST STEEL
CLASS BR

Pride of the Fleet.

Now there's a flat car that outruns them all. She's a fast 60-footer that slips in and out with ease, switches cargoes with speed. She takes on tie-downs for tractors and farm equipment, bulkheads for wallboard, or goes into general service with no changes at all. She usually sails under the FTTX, OTTX, PTTX, MTTX and TTHX flags. But, she can sail under yours. Welcome aboard!

Pullman-Standard

WORLD'S LARGEST RAIL CAR MAKER

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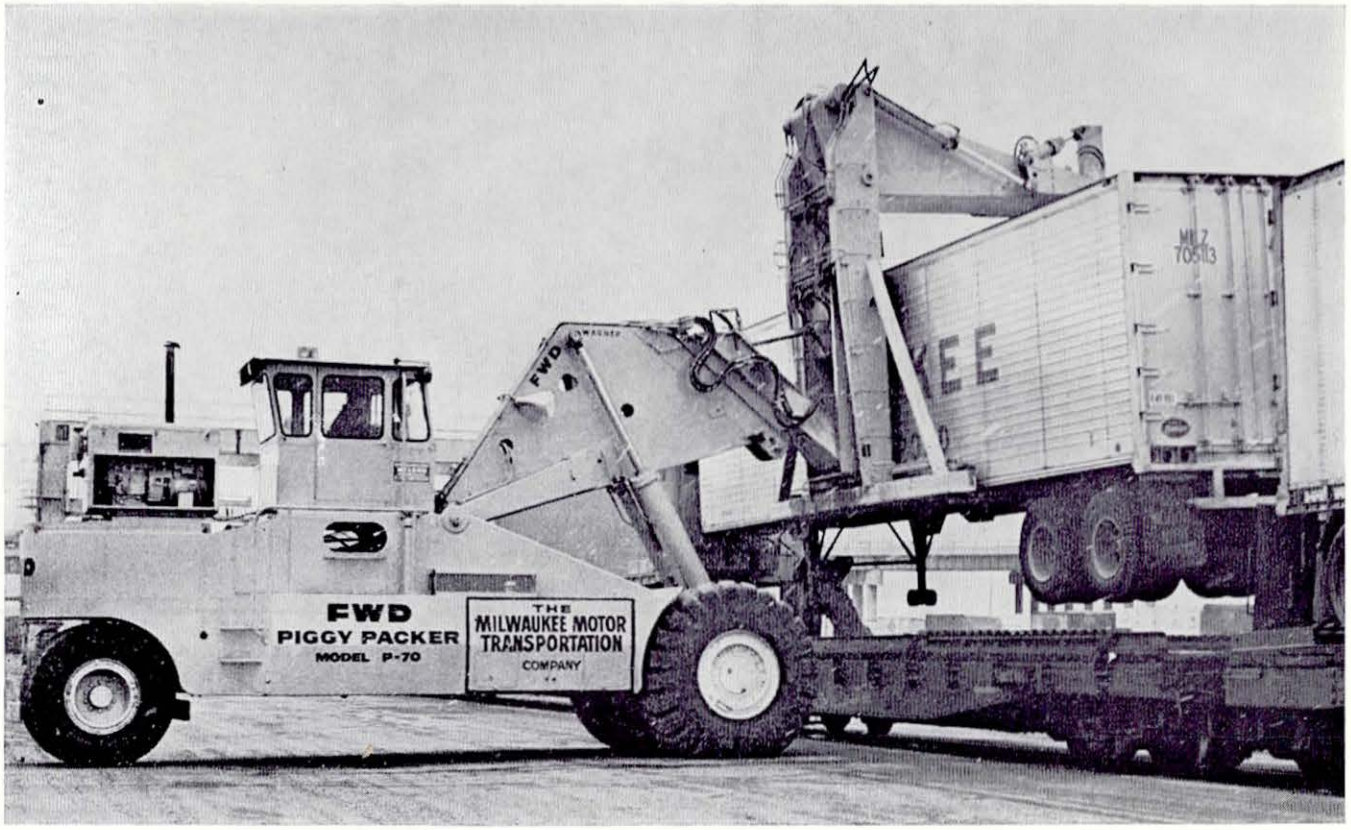
Only Piggy Packer unloads anywhere



You've never seen versatility like this! This huge, overgrown tricycle can sidle up to either side of any flat in the string and lift trailers or containers on or off. It unloads selectively in minutes or less—"hot" stuff first. No need for hours of switching to accommodate ramps or overhead cranes.

FWD Wagner Piggy Packer's jaws lift and carry up to 70,000 lbs. safely and gently. Tricycle design gives you extra short turning radius. Talk about manueverability—Piggy Packer turns on a dime in the tightest corners of the yard. Side shift and boom extension features mean instant spotting on bolsters.

Piggy Packer has big brothers doing heavy handling jobs in a hurry in the lumber and steel industries. These are tested, proven machines. Standard components makes them as easy to service as your trucks. Large oversize tires makes 'em easy on any yard surface. It's the greatest thing on wheels for handling trailers or containers *fast. Check Piggy Packer costs against all other systems.*

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Passenger service: No influence on freight

Service, equipment, schedules, not emotion, control routings.

1) In routing your freight, as between two or more competing railways which offer approximately comparable equipment and service, do you pay any attention to the presence or absence of passenger service?

Yes, or "Yes, to some extent" 5
No, or "Ordinarily, no" 90

2) Does the amount or quality of passenger service offered by one railroad as against another which provides less service, or service of an inferior quality, affect your freight routing?

Yes, or "Yes, to some extent" 4
No, or "Ordinarily, no" 91

For comments and explanations of answers, see accompanying text.

Routing of freight traffic is not affected by the presence, absence or quality of passenger service provided by a railroad.

That's the only possible conclusion which can be drawn from the heavily one-sided results of this month's Traffic Poll.

One answer on each side is, it should be noted, somewhat qualified; and a number of respondents do express regret at withdrawal of passenger service or deterioration in its quality. Either process, they feel, may downgrade the general impression of a given railroad.

Taken as a whole, however, the Poll thoroughly spikes the sometimes-voiced contention that railways which provide passenger service gain freight; those which do not, lose it.

A New Jersey traffic man, for instance, just "sees no connection" between the two. R. A. Stuart, assistant vice president, Whitehall Laboratories, New York, "can't imagine a traffic manager routing his freight on the basis of passenger service." And H. B. Brown, general traffic manager, Mobil Oil Corp., also of New York, says "we do not really know, in making our freight route selections, to what extent railroads of our choice provide or don't provide passenger service."

● **Where passenger service counts.** One of the few men who says he does consider passenger service in routing freight is T. J. Rowan, traffic manager, Mandan (N.D.) Creamery & Produce Co. He gives an excellent reason for it. "We are a centralized creamery, and depend on direct shipments of raw products in baggage cars of passenger trains, or trucks. Arrival of passenger trains at regular times each day allows better scheduling of operations than truck service, which is irregular. Consequently, we patronize railroads operating passenger trains with our outbound manufactured dairy products in freight trains, if for no other reason than to encourage them to continue passenger service."

Other reasons given for favoring passenger-carrying railroads with freight business are of a more general nature.

One is advanced by C. B. Culpepper, general manager, Atlanta Freight Bureau: "The fact that a railroad is continuing to endeavor to provide full service to the traveling and shipping public gives an incentive to favor it with profitable business."

Another is from an Ohioan who asks not to be identified, but who feels that "where there is good to excellent passenger service, other than commuter, service for freight is of comparable quality. Railroads offering good passenger service seem more alert and attentive to public needs than those offering only freight service."

W. G. Koplin, TM, Salt Lake Hardware Co., says he considers passenger service "to some extent," partly because he has to help people plan travel itineraries; partly "because it is probably human nature to look at over-all service and performance, and favorable impressions do influence routing."

Reward for carrying commuters

A Chicago traffic man who prefers to remain anonymous answers "ordinarily no" to both questions, but indicates a possible exception "when a great many of our company employees depend on a given railroad's commuter service to get to and from work. In such a situation our company indirectly benefits from that service, and to that degree we depend on its continuity. . . . The reward of some profitable freight is a measure of repayment and a way to encourage continuity of the service."

● **Not an "emotional" question.** As stated at the outset, however, the vast majority of all replies make it perfectly clear that almost no traffic managers consider passenger service of any kind in routing their freight.

"While I deplore the apparent necessity for railroad management to seek discontinuance of certain passenger service, this company, in selecting rail freight routing, is motivated entirely by services offered for that tonnage, and not by emotional factors," says R. L. Andreas, director of purchasing and traffic, American Oil Co., Chicago.

Andreas' views are substantially echoed in many other comments.

"Customers' requirements come first, and the fastest rail service we can get is the carrier to get our business," writes H. T. Jacobson, TM, Bridgeport Brass Co., Bridgeport, Conn.

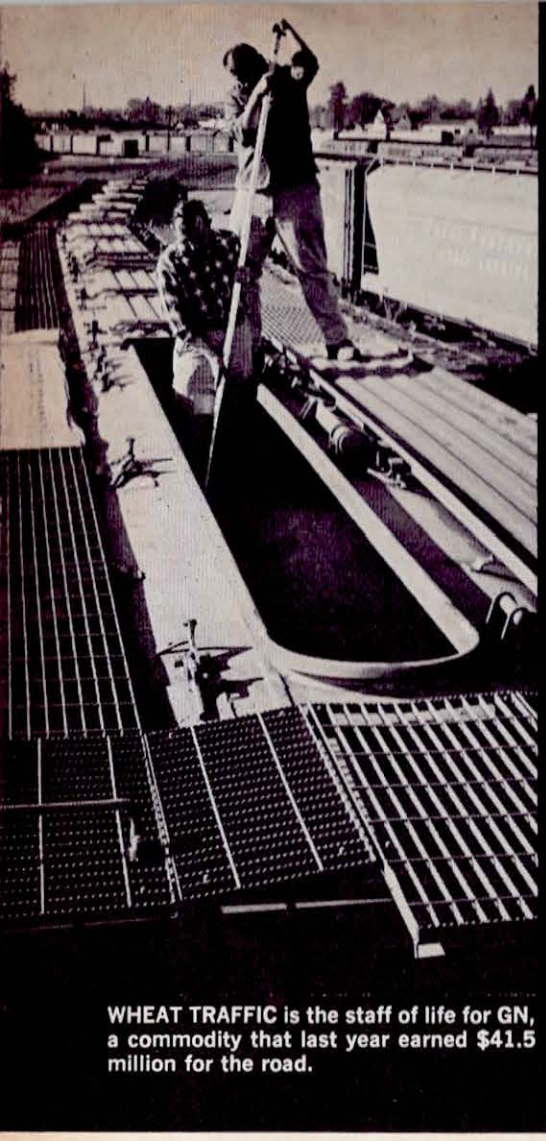
A grain man who asks not to be identified says "it is equipment which governs who gets competitive traffic."

H. N. Johnson, vice president—traffic, Ralston Purina Co., St. Louis, declares that his company "favors those roads that work closely with us in matters of service to our customers, in the furnishing of suitable equipment, and in rate negotiations."

"The only requisites considered in our decisions as to what routing should be used are terminal delays, switching, car supply, service and industry locations," says N. C. Kunzmann, TM, Tissue Products Division, Georgia-Pacific Corp., Bellingham, Wash.

For Reynolds Metals, "good dependable freight service" is the primary need, according to its director of trans-

(Continued on page 52)

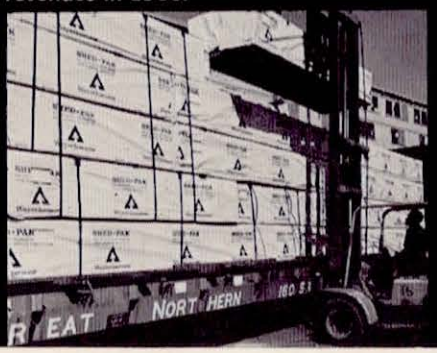


WHEAT TRAFFIC is the staff of life for GN, a commodity that last year earned $41.5 million for the road.

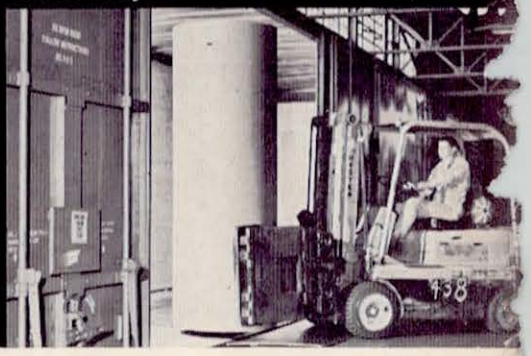
AN APPLE A DAY—multiplied a thousandfold—gives GN a robust business, much of it by TOFC, out of Wenatchee, Wash., "Apple Capital of the World."

Objective: More of the same-and

NO. 2 REVENUE EARNER is lumber (next to wheat) which added $28 million to GN revenues in 1966.



ROLLS OF NEWSPRINT, being loaded here in 60-ft plug-door cars, earned GN $1.8 million last year.



Great Northern ready to

"We need," says GN President John Budd, "to find out all about our customers' operations and plan with them how our services will fit into their systems on a logical and economical basis for both of us. Then we need to sell this service."

The plan of attack is ready, the troops have been briefed—and Great Northern is about set to test its new concepts of marketing where it counts, out on the old battlefield of competition.

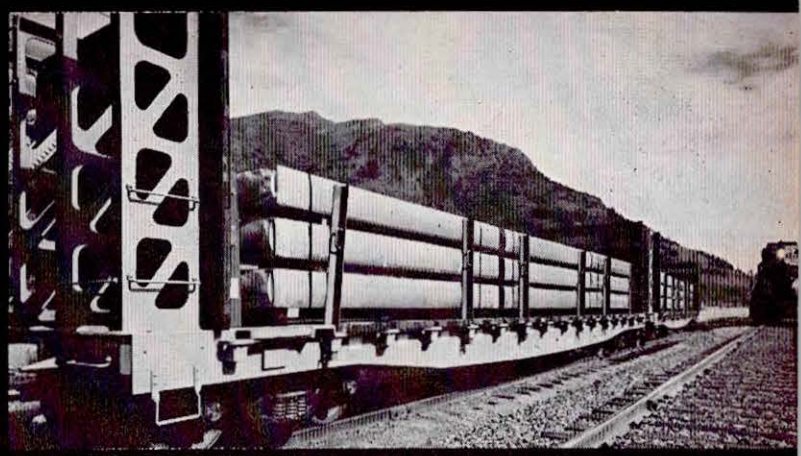
For GN, this is no venture into what the skeptics might call "instant marketing." More than a year ago, shortly after rejection of the proposed Great Northern Pacific & Burlington merger by the ICC, the over-all planning began. The goal was increased profitability, and no element of GN operations was safe from scrutiny. GN's own people started looking at things. The fresh viewpoint of an outside consultant—McKinsey & Co., of Chicago—was made available. And along about Jan. 1, 1967, the real work began on an overhaul of the traffic department.

● **The big switch.** Officially, Great Northern now has a marketing department, both in name and in scope of its new responsibilities. Traffic Vice President M. M. Scanlan went to bed on the night of June 30 and woke up as Marketing Vice President Scanlan on the next morning. Other GN people made the same midnight transformation. Vincent P. Brown became assistant vice president—pricing. Division Superintendent Paul F. Cruikshank became Assistant Vice President Cruikshank in charge of market planning. Scanlan's former assistant, Ralph L. Merklin, became Assistant Vice President Merklin, in charge of marketing—administration. Land and Tax Commissioner James C. Kenady became Assistant Vice President Kenady in charge of industrial development.

And then, for Mal Scanlan, Vince Brown, Paul Cruikshank, Ralph Merklin and Jim Kenady, the work really began.

In all four major areas of thrust,

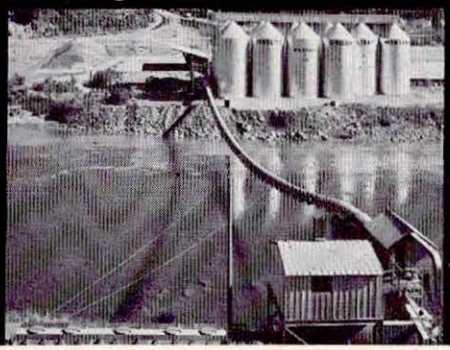
GRAINS OF SAND replace grains of wheat in dual-purpose covered hoppers that carry variety of traffic for GN.

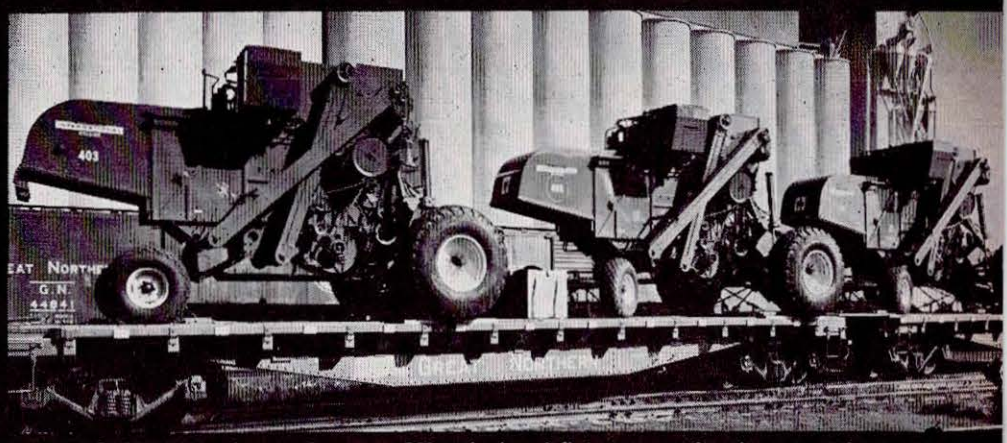


ALUMINUM INGOT TRAFFIC is a good revenue producer, and GN hopes to increase shipments of the metal.

then some

MINE-TO-MARKET SHIPMENTS of vermiculite in covered hoppers give double-duty use to GN grain cars.





FARM EQUIPMENT, shown above on GN articulated flat cars, ranks about two thirds down on the list of the road's 100 top commodities.

test new marketing ideas

much remains to be done. However, the design has been developed and agreed to, and the initial steps have been taken toward, hopefully, a significantly more aggressive, more imaginative and better thought-out marketing effort. Cruikshank's planning department, is as yet, almost completely unstaffed. Key positions—research director, market managers, equipment specialist—have to be filled, and the search is on for qualified candidates. Sales agencies, both on- and off-line, have to be converted to the new marketing organizational setup. That job is barely under way. Industrial development will be getting far more attention than it has in the past, and Kenady's starting out now with a researcher's approach to getting the tools he needs to do the job.

● **What's the target?** The goals set for the marketing department seem realistic. For the next five years, GN will be shooting for increases of 3% in gross revenues each year. The figure itself is hardly one to inspire awe, particularly when it's noted that the road's freight revenues in 1966 were up by about 6% from 1965 levels.

But, of course, there's more to the business of goal-setting than meets the casual glance. The 3% target is defined in absolute terms, without consideration to such factors as rate changes or inflation. It could be regarded as a minimum objective. And GN's real goal would appear to be consistency of revenue increases, with the actual amount of increase no more important than the establishment of a pattern of annual gains.

If GN's operating revenues are plotted for the past decade on an index basis, the resulting chart resembles a profile of the Cascade Mountains, with a peak in 1957, a deep valley in 1961 and a peak again last year. The road has had an unbroken string of revenue increases since '62—but only last year was GN able to get its revenues back up to the level of 1957, when the slide began.

In the meantime, over the 1957-66 decade, operating expenses have been well controlled and there's been considerable improvement in net income. But even with tight control of expenses, that 6% revenue increase last year failed to produce an increase in net, as federal income tax accruals more than doubled and equipment rents went up along with expenses.

In a setup such as GN has arranged, no one element of the marketing department outweighs the others. But it seems safe to guess that tremendous responsibilities are going to rest with the group headed by the youngest of

"We're going to build slowly and make sure of our results."

the assistant vice presidents, Paul Cruikshank.

● **How planning will work.** Market planning, as envisioned by GN, will be just a bit different from the planning undertaken by most other marketing-oriented roads. Eventually—it may take several months, it may take a year—GN will have a dozen or 15 market managers who will be assigned specific customer accounts, generally in related commodities. Each man will have 10, perhaps 12, key accounts. And it will be each market manager's responsibility to know as much about a customer's total distribution needs as the customer knows.

GN is the kind of railroad where concentration of this type should pay off. Last year, the railroad did business with more than 37,000 shippers. But the top 100 shippers accounted for 76% of total revenues, and just 44 major shippers gave GN 62% of its freight revenues. Or, to put the breakdown another way, the road's biggest single shipper accounted for just under 7.5% of total revenues, and only 19 customers were on the list of shippers with 1% or better of the total.

Position descriptions for the market managers make it clear that only the competent need apply.

The market manager, the book says, "calls on key decision-makers . . . acts as the primary representative of Great Northern with the key accounts assigned to him. . . . Generally, he is the primary point of contact for senior shipper executives. . . . He builds and maintains a deep understanding of his key accounts' organization, technology and distribution processes. . . . He must be constantly aware of his key accounts' plans, needs and actions."

● **Building—with care.** Cruikshank makes it clear that his first and most vital job is in organization-building: "A lot of companies go in overnight, they fill up the boxes on the chart, and they have a marketing department. We're determined not to let this happen. Sure, we're going to try to take advantage of the enthusiasm this new approach has generated—but we're also going to build slowly and make sure of our results."

Another big element in Cruikshank's job, obviously, will be the working out of even closer cooperation between marketing and operations. Here, GN has what seems to be an ideal pairing in Cruikshank and Worth Smith, another former superintendent now assigned as assistant to the vice president-operations.

GN traffic men, old hands at the business, will say that relations between the old traffic department and the operating department have been good. But Cruikshank will also point out that there have been problems, when the sales people proposed a change and the operating people got sensitive about it. Now, he and Smith will be working closely—and, as Cruikshank puts it, "we'll be making sure here that the proposals from the marketing group will be sensible enough to have the operating department listen."

Clear aim at the targets

Ralph Merklin, with heavy responsibilities in the sales area, is agreed that the market-manager organization will give GN a sharp new focus on its primary revenue-producers and, at the same time, a greater ability to go after more business from the smaller accounts. And he, like other GN officers and supervisors, is wholly realistic about the attainment of marketing's goals: Some improvement may be evident in 1968, but it's going to take two or three years before the full effects of the effort can be measured.

● **What's ahead for salesmen?** This year and next, GN is planning for major improvements to be made in four areas at the field sales-agency level, on- and off-line:

— A systematic approach to focusing sales efforts on high-payoff accounts will be installed, without neglecting any accounts.

— Territorial boundaries for both agencies and individual sales reps will be realigned to bring about a better balance of work.

— More and better information will be made available to sales managers, to help them both in planning their work and in evaluating results.

— Increased authority and responsibility will be given to agency managers. In this context, there may be also a carefully-planned upgrading of sales-personnel salaries and expense provisions, along with a reduction in the number of levels of supervision between the agencies and top decision-makers at GN headquarters in St. Paul.

Conversion of agencies to the marketing setup began this month, with a field sales team starting out in the Spokane area. After a four-week stay with three agencies—Spokane, Kalispell and Nelson—the team will head into an off-line situation, most likely in San Francisco.

All agency-conversion work is expected to be completed by July 1968, though GN says that all sales personnel transfers may not be finalized by that time.

The first real word traffic-department people got on their new functions came during what, for GN, was an almost unprecedented event—a full-scale staff seminar at Glacier Park during the last week in June. During three days of meetings, department supervisors from the rank of sales manager up were briefed by GN's own people and by representatives of McKinsey & Co., the consultants GN called in to make the studies which led into establishment of the marketing program.

● **Word from the top.** Nobody could mistake the importance GN attaches to the program, or the degree of top-level backing which it has. On the schedule for the sessions were informational-inspirational talks by GN President John M. Budd; Scanlan; Executive Vice President R. W. Downing; Vice President-Administration T. J. Lamphier; Vice President-Operations John L. Robson; Vice President and General Counsel Anthony Kane; Vice President and Comptroller John A. Tauer; Clark A. Eckart, Vice President-Executive Department (Seattle); and Executive Assistant C. W. Moore, plus representatives of several other GN departments.

With merger still very much alive—and with decision now expected in the ICC's reconsideration of the GNP&B case by the end of the summer—the question is always raised as to why Great Northern plunged into a full-scale study of its own operations. GN people know it's a valid question—and, they contend, there's a perfectly logical answer: During the years in which merger was being progressed, before the ICC's 1966 6-5 rejection of the proposal, there was a tendency—not surprisingly—to hold off on a number of programs. Bob Downing is candid about it: "We were so preoccupied with the merger—and we deferred things which really should have been done." He's just as candid about the marketing program, and about other programs GN is studying: "These studies would help a merged company just as much as they're helping GN alone." If merger is again rejected, GN will have gained in time saved on its individual studies. If merger is ap-

M. M. SCANLAN
Vice president—
marketing

VINCENT P. BROWN
Assistant vice president—
pricing

PAUL F. CRUIKSHANK
Assistant vice president—
marketing planning

GN builds a marketing team with experience

RALPH L. MERKLIN
Assistant vice president—
marketing

J. C. KENADY
Assistant vice president—
industrial development

Great Northern's top marketing men—the vice president and four assistants—are, generally, a young group. But they're also a group rich in GN experience.

Marketing Vice President M. M. Scanlan is in his 39th year with GN. And he's seen most aspects of the traffic-development activity, with service in the freight-claims, traffic and industrial departments. He was director of the road's division of economic research prior to his election as vice president-traffic about a year and a half ago.

Vincent P. Brown, now assistant vice president-pricing, also started in the freight-claims department, in 1918. He was general freight traffic manager-rates and divisions prior to his appointment as assistant vice president-rates and divisions in 1961.

Paul F. Cruikshank is one of two top-level marketing men to make the switch from the operating department—and he did it just a month ago, with his appointment as assistant vice president-marketing planning. Cruikshank started as a student brakeman in 1952 and, after a hitch in the Navy, returned to GN as assistant superintendent - maintenance and engineering at Spokane in '56. He's been superintendent of four GN divisions, and headed the Kalispell Division at Spokane before being called into the marketing operation.

Assistant Vice President-Marketing Administration Ralph L. Merklin started in GN's operating department in 1940, then switched to the traffic department seven years later. He was general freight agent at Seattle when he was brought to St. Paul last year as assistant to the vice president-sales.

The fourth assistant vice president, James C. Kenady, has the industrial development responsibility. He joined GN 21 years ago as general tax agent and moved up to become land and tax commissioner in 1952.

GN MARKETING SUMMIT MEETING

Glacier National Park was the background for a meeting of GN officers at a recent marketing seminar. Left to right, R. W. Downing, vice president-executive; President John M. Budd, M. M. Scanlan, vice president-marketing, and J. L. Robson, vice president-operations.

proved—as many observers now predict—GNP&B, or whatever the new company is called, will benefit.

● **Studies begin.** So GN retained McKinsey & Co. in the autumn of '66 to take an over-all look. Marketing was only one of the areas under study. The consultants also dug into operational improvements, particularly in the areas of yard performance and locomotive and car maintenance. They looked into better ways of controlling material-and-supplies inventories. They studied new ways and means of administrative cost control. They looked at GN's cash-management policies.

In marketing, the outside look was blended with GN's own knowledge of the historic traffic patterns. Past, present and future were tossed into the same mixing bowl, and the result was a program—one aimed in the direction of profit-building by capitalizing on realistic assessments of prospects.

Basically, the researchers' conclusions are that GN will have to do a better job of what it's been doing all along. There are no prospects for any significant changes in the makeup of traffic—products of farms, forests and mines will continue to account for between 60% and 65% of total business. Commodities in the manufactures-and-miscellaneous category are expected to show traffic increases—but not by enough to change the ratios.

Further, there seems to be no big change coming in present traffic balances and imbalances. And GN faces continuation of the "barbell" business silhouette—good traffic density from an origin-destination standpoint at St. Paul-Minneapolis and Duluth-Superior on one end, and at Seattle-Tacoma and Portland and Vancouver, B.C., on the other end, with not an awful lot in between. As one McKinsey staffer puts it, "No matter how you look at it, those who believe that Great Northern need only wait for more business until its interior fills will have a long wait indeed."

● **Where GN must act.** Still, there are strong recommendations that GN put new emphasis on "underdeveloped" industries, such as those whose products fit the manufactures-and-miscellaneous grouping. As McKinsey people note, this commodity category shows at least three distinct advantages: Its projected growth rate is attractive, the east-to-west traffic flow would be most helpful in righting current traffic imbalances, and the profit potential is most attractive.

One reported industry traffic-share projection points up the need for renewed efforts. It forecasts, in part, that "railroads will continue to lose their position to competitors. . . . The railroads' share of market has dropped from 74% in 1930 down to about 43% today. It is expected that this share will drop still further by 1980."

> **"Our efforts should be to initiate programs for our customers. We should invest in new, special equipment for commodities which have good profit margins and above-average growth prospects."**

The consultants see five major areas in which GN must move, if it's to stem this trend:

— There must be greater investment in equipment. GN, McKinsey people say, "has made large equipment commitments. It appears that equipment investment requirements will continue to mount."

— There must be a continuation of the trend to easier-to-load and higher-capacity equipment.

— The railroad must develop better intelligence regarding customer needs. And then it must move to satisfy those needs.

— There must be "greater commitment to individual customers through specialized and assigned equipment as well as new services."

— Finally, GN must meet the challenge of "increased exploitation of shippers' focus on their full distribution costs."

Ralph Merklin, talking to GN sales managers at Glacier Park, spelled out in detail what's involved.

Last year, Merklin said, "We did business with more than 37,000 customers, involving probably 100,000 to 200,000 decision-makers. We moved 4,000 different commodities between 60,000 points, involving interchanges with 35 railroads at 137 different points. Hundreds of thousands of rates governed the prices we charged. Now—can Great Northern analyze the needs of each of these 37,000 customers, or personally call on the 100,000 to 200,000 people who could possibly make a traffic decision favorable to our railroad? Can we develop programs for each of the 4,000 commodities? Can the pricing department review each of hundreds of thousands of rates?

"The answer to all these questions is obviously 'no.' Chance customer requests or competitive actions often provided the direction for our efforts.

"What is plainly needed is a purposeful focusing of Great Northern's efforts. Our efforts should be to initiate programs for our customers. We should invest in new, special equipment for commodities which have good profit margins and above-average growth prospects, and which are vulnerable to competition. And our efforts should be to design new services for those areas where population and industrial development will be the greatest.

"But don't get me wrong. By focusing efforts in these ways, we don't intend to ignore the other opportunities in our business. It's going to be a challenge to GN decision-makers to find economical means with appropriate priorities for reaching this segment of our market—and we intend to do this."

● **ID, pricing change.** As GN phases into its marketing program, the new look may be most evident in the market-planning and sales-effort areas. But significant changes are also being made in the railroad's industrial-development promotion and in its approach to pricing.

Assistant Vice President Jim Kenady sees two major opportunities for improving the effectiveness of the ID program. One involves a strengthening of the promotion of available services and sites; the second is based on a strengthening of the coordination between departments in processing individual ID projects.

As one point of departure, ID people are beginning to develop their own prints of land available for industrial use. Heretofore, basic source material on land had been operating-department prints—and while they were fine for operating purposes, they remained less than adequate for ID in their portrayal of such elements as land zoning and highway and utilities availability.

In addition, Kenady and his people will be working outside the company to build a better file of contracts in industry and in government at all levels. And they'll be working within GN to streamline administrative processes, eliminate confusion and duplication of effort and

make it unnecessary for the shipper or industry representative "to act as his own coordinator."

In service pricing, basic responsibilities will remain much the same—but there's going to be a realignment of responsibilities and there's going to be greater initiative in proposing new rates.

Before July 1, the rate department was organized into three major sections, reflecting a geographic rate-jurisdiction separation. But rate work roughly parallels sales work when the breakdown is made on a commodity basis—that is, GN's 25 most important commodities account for 79% of freight revenues and 71% of all rate proposals made.

● **Pricing streamlined.** Under the new setup, there are two sections—pricing analysis and pricing services. Though the names don't indicate clearly, the analysis section will be responsible for system analysis work on all commodities except grain and grain products; and the pricing services group will be responsible for progression of and decisions on all rate proposals on a system basis. Grain—a big enough job, when it's considered that wheat alone brought in revenues of more than $41.5 million last year, and that four of GN's top-10 shippers are grain-trade organizations—will be handled in a special section, both in analysis and in decision-making.

The pricing analysis section itself will be split into six commodity teams to give GN a system consideration over all traffic except grain and grain products. Teams will operate in the areas of lumber and paper products; mine products and non-metallic minerals; metal and machinery products; food products; chemical and petroleum products; and unassigned manufactured goods. These teams will work closely with market managers having responsibilities for companies in similar commodity groups.

Vince Brown outlines the benefits from the new pricing organization in this fashion: "First, we'll be developing real commodity expertise in support of our new marketing program, Second, there will be increased emphasis on sound, in-depth analysis in the interest of shippers and receivers. And finally, our lines of communication will be shorter. We'll get decisions which are reached faster, are more consistent and give more comprehensive recognition to the important collateral effects on all shippers in all areas."

● **Controls on quality.** All of the commodity, customer and rate research GN can muster, however, isn't going to guarantee higher revenues and net income—and that's where Vice President-Operations John Robson and his staff come in.

Robson can point to substantial improvements in operating performance. At the Glacier Park meetings, for instance, he noted increases since 1962 of 10% in car-miles per car-day, 22% in train speeds, 11.8% in net load per car, 9.5% in gross ton-miles per train-hour.

But Robson is more concerned with the future—and he closes in on one particular aspect of improvement that's needed: Quality control of the transportation product produced by the operating department.

All of the marketing research and planning, he declared, "is of no avail if it is confronted with poor performance, inconsistent arrivals, mishandling, excessive damage, or if there is just a general lack of transportation quality. In the area of service and the control of the quality of service, there is much for the operating department to do. And until railroads learn how to control in a systematic manner the quality of the service they provide, they can never be completely customer-oriented, no matter how many price adjustments are made or special-design cars purchased."

Railroads, Robson conceded, "don't ordinarily have a dependable check on the quality of freight service. They are saturated with figures on train speeds and tonnage, but these determinations provide little or no information as to the time it has taken to move a carload of freight from originating to terminating point, from dock to dock."

What is quality control? As Robson sees it, quality control "aims to isolate the causes of inadequate service and to provide measures and standards for correction. Quality control aims to minimize and eliminate, if possible, poor-service complaints. Quality, applied to rail transportation, is the establishment of a level of performance and cost against which the actual product may be gauged."

"Quality, applied to rail transportation, is the establishment of a level of performance and cost against which the actual product may be gauged."

● **System's coming up.** And what is GN doing in these areas? Under Vice President-Administration Tom Lamphier, GN is moving into a comprehensive management information system. And, with the help of its consultants, the railroad is also coming to grips with systems designed to "substantially improve the handling of cars in terminals." The terminal-improvement program has already been tested in one important yard; it's being installed now at a second point; and it will be spread system-wide.

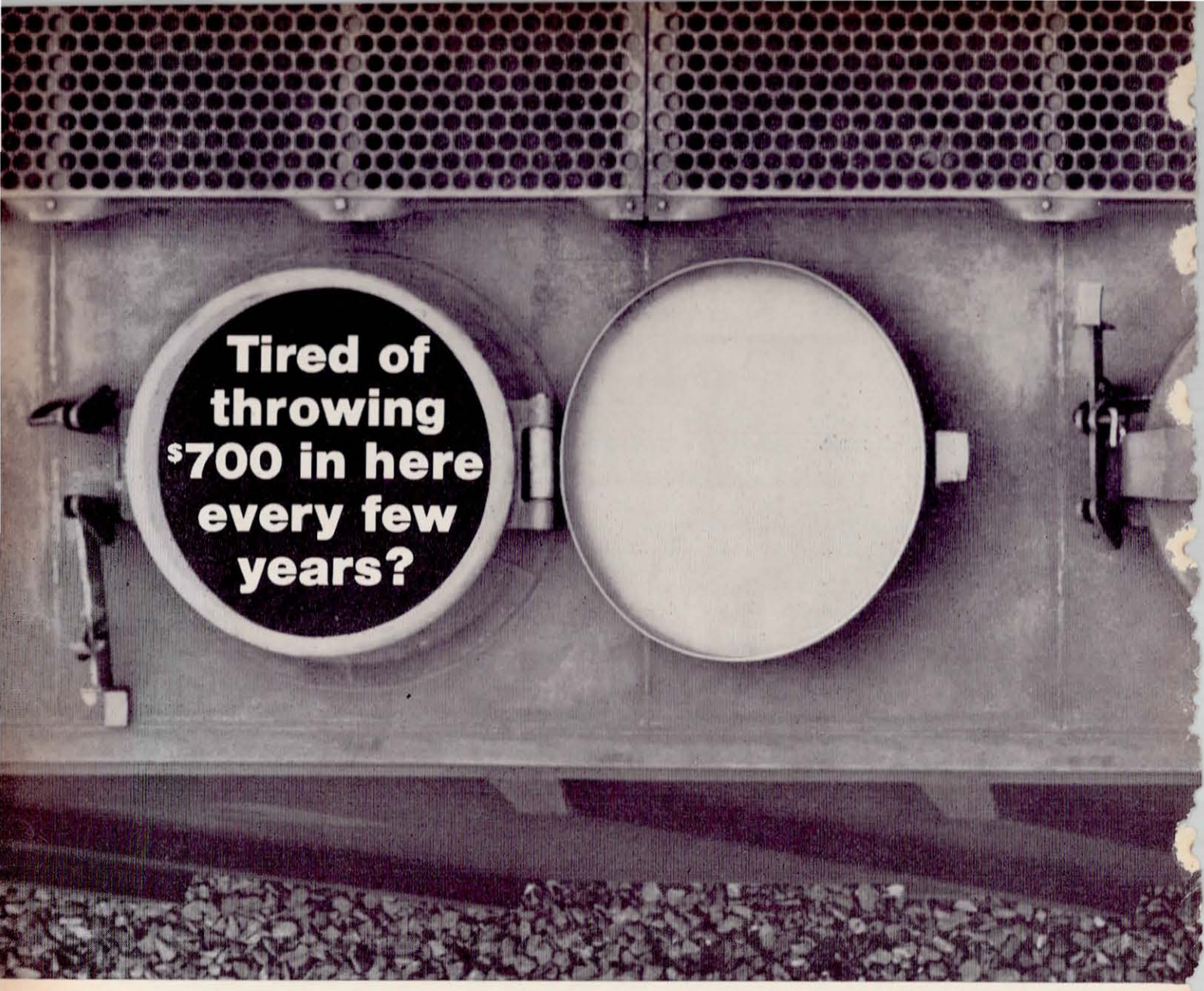
Generally, GN's marketing men are being made well aware of the help they're going to get in developing the product—and they're also being told just what the potential is.

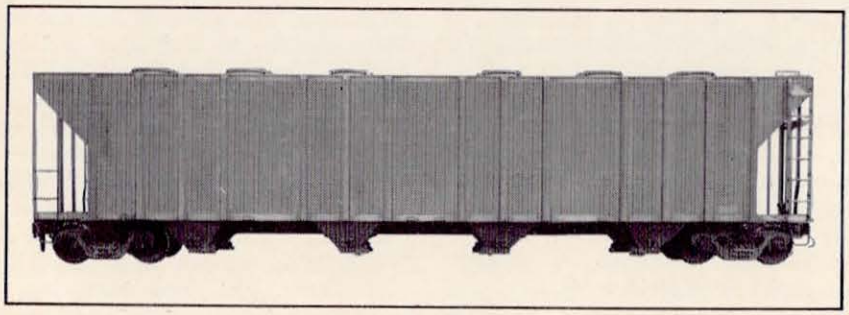
Executive Vice President Bob Downing stresses the twin points of available plant capacity and quick translation of additional business into additional profit. Through a proper combination of marketing skill, good service and availability of equipment, he points out, "it is certainly possible to add 10% to our gross freight revenues in a relatively short time. Having in mind that our freight revenue last year was about $250 million and that our net income before federal taxes was $49.3 million, we can figure that a 10% increase in revenue, or $25 million, would have raised the pre-tax profit by about 36%, to $66 million—since it can be shown that relatively small increases in revenues can produce relatively large increases in net."

● **The meaning of it all.** John Budd comments that "transportation is only one cog in the distribution-wheel of industry. We need to find out all about our customers' operations and plan with them how our services will fit into their systems on a logical and economical basis for both of us. Then we need to sell this service."

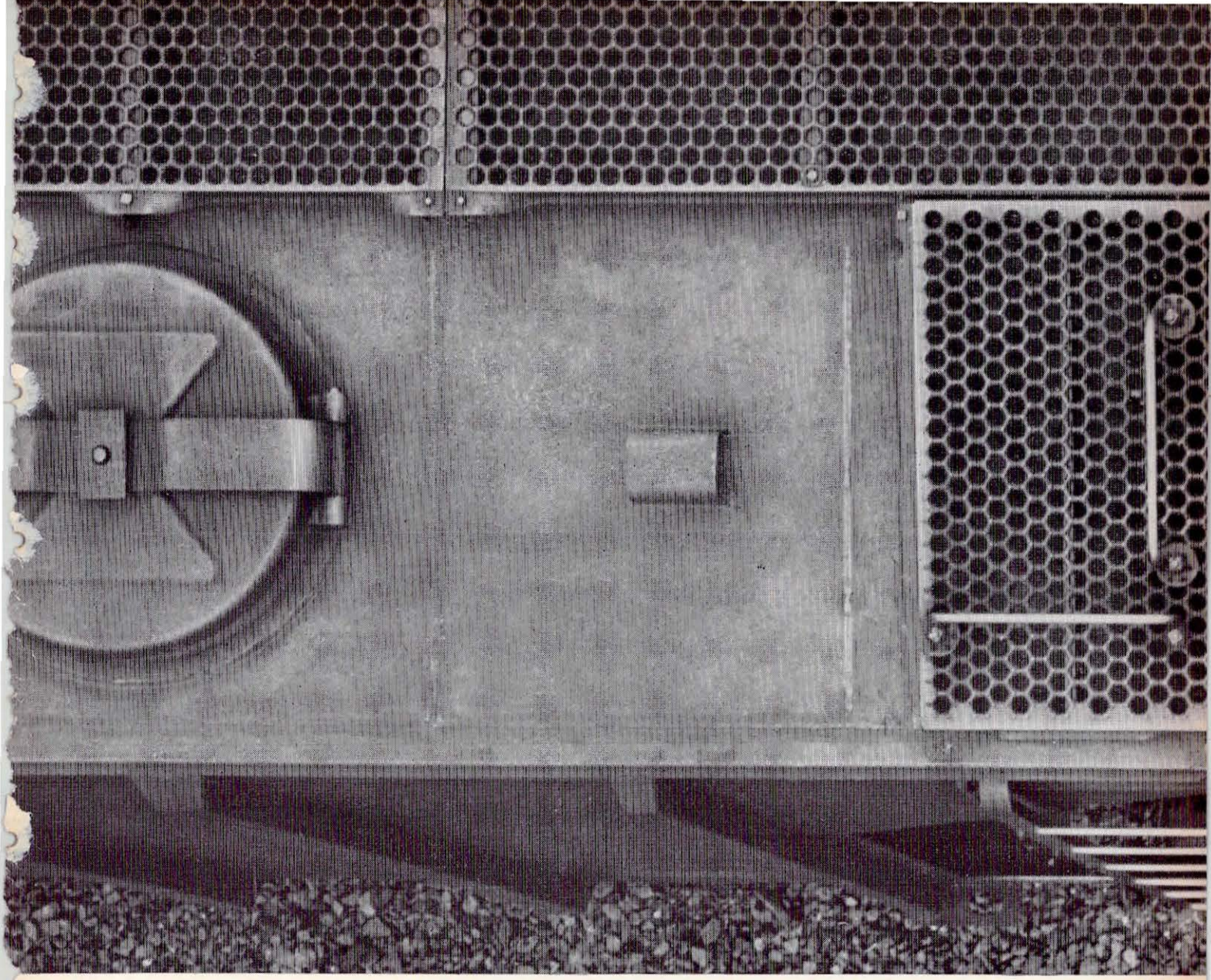
Or, maybe it might be put in a slightly different context by a man such as G. D. Johnson, general sales manager at St. Paul. Jerry Johnson has put in well over 40 years with GN. Right now, he's hobbling around on a bum ankle that hasn't quite come back from a break last winter, and he's been looking forward to retirement in a few more months. But he may not make it quite that soon, because one day not long ago he volunteered to stay on the job just a while longer, in the event his experience could be useful.

Among the veterans and among the youngsters in the organization, GN people will say, the spirit's willing. And if the programs can be fleshed out as they're supposed to be, marketing, GN-style, could be a swinging thing. ■





Investigate aluminum-body covered hopper cars. They never need lining.



Why throw good money away, gritting your teeth every time a steel covered hopper car needs a plastic liner? It can happen two or three times over the car's service life—at $700 to $800 a crack.

A covered hopper car with a body of Reynolds Aluminum, on the other hand, needs no lining. It never rusts. Surfaces are smooth, gleaming, naturally resistant to corrosion. Just as it protects food products and other sensitive cargo from contamination, aluminum shrugs off the effects of the most corrosive ladings. This *no lining required* feature more than offsets the higher initial cost of an aluminum-body covered hopper, and generates big savings for you over each car's lifetime.

Aluminum surfaces are easily cleaned. Interiors may be swept down and hosed out quickly, easily —left to drain dry without fear of rusting. Not so with a steel hopper's interior. It must be re-lined or sandblasted to clean out built-up residue. (Just think about the cumulative effect of 3 or 4 sandblastings on slope sheets.)

Another factor: lost utilization, expenses incurred and revenues lost by down-time. It starts with the cost of moving steel hoppers to and from your shop. Then $700—$800 per car for relining. And, most vitally, missed payloads while cars are out of service. Those lost revenues can never be regained. (The cycle repeats itself for lining patch-up jobs . . . every two years on one major road.)

Aluminum's low-maintenance needs are far from your only plus-benefit. Lower deadweight is another. An aluminum-body covered hopper has substantially larger capacity than a steel car the same size. It can haul 7-8 tons more payload on every run.

Covered hoppers of Reynolds Aluminum bring you higher rates for off-line service, too. What's more, their light weight cuts round-trip ton mileage, reducing your operating costs. Finally, each delivers over $2,000 more in eventual scrap-value than a comparable steel car.

It's hardly surprising, therefore, that more and more railroads and shippers specify aluminum bodies for their covered hoppers all the time. Learn the full story. The men at Reynolds are the leading supplier of aluminum and aluminum know-how for railroad applications. Contact your local Reynolds office or write *Reynolds Metals Company, P.O. Box 2346-TM, Richmond, Va. 23218.*

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Flexi-Flo: Case study

Well-researched combination of rates, service and equipment is bringing the NYC big gains in bulk commodities.

Flexi-Flo service for coordinated rail-truck transport of bulk commodities is growing—as fast, apparently, as the legendary Topsy. But where Topsy's growth, as narrated by her literary creator, was described as somewhat accidental, that of Flexi-Flo is something decidedly different.

It is no accident. It is a direct result of long, intensive and careful research and planning. It provides, says New York Central Vice President—Marketing J. R. Sullivan, "a prime illustration of the marketing philosophy at work."

What Flexi-Flo is, and how it operates, are briefly described on page 40. What it has done for the Central is shown by the fact that NYC's cement traffic alone, handled by Flexi-Flo, increased from about 250,000 barrels in 1964 to 1,000,000 in 1965 and 1,650,000 in 1966, with gross revenue last year of more than $2,000,000.

What makes those figures remarkable is that they represent a complete reversal of a trend which began in the 1950s, when rail traffic declined rapidly in the face of increasing output from a decentralizing cement industry.

"The truckers murdered us," says Sullivan. "Although we slashed our rates to the bone, our traffic continued to drop off precipitously. It quickly became clear that if the railroads were to regain a significant portion of the cement business, a new transportation service had to be found."

• **Marketing moves in.** That's when the Central's still fairly new marketing staff was sent into the game.

What they did to reverse the trend, and how they did it, is a first-rate study in what true market research and logistics planning can do for a railway and its customers. Here, somewhat condensed, is the NYC story, as related to a Railway Age editor by D. R. Lawson, manager, construction industry services, and H. G. Hohorst, who was director of market planning and research for the period involved.

HOW FLEXI-FLO WORKS FOR CEMENT

At New York Central's Syracuse Flexi-Flo terminal, a "pressure differential" Flexi-Flo car and local delivery truck are connected by a hose. Blower on the truck pressurizes the car at 15 psi for 3-4 minutes; then continues to maintain enough pressure to push cement from the car into the unpressurized truck.

in successful marketing

IT DOES THE SAME FOR OTHER PRODUCTS, TOO

Liquid sugar ("Sobitol") is transferred, contamination free, from Baird Chemical tank car to stainless-steel truck.

• **Began with chemicals.** It began with a study of chemical traffic initiated in 1962-63—and that's about the only thing in the whole narrative that might be considered "accidental."

At the very outset, Lawson and Hohorst explain, the chemical studies showed that the railroad had a two-fold job if it was to retain or regain traffic. First was to develop equipment to handle dry chemicals efficiently and without danger of contamination. Second was to convert to more efficient bulk shipping an industry which had customarily handled its dry products in bags or other containers.

That's when the marketing men began to think of cement. Doing so simplified the problem. Cement manufacturers were already basically bulk shippers, so there was no need of "conversion." Their product was essentially uniform, without the varying characteristics of chemicals. And cement, because of its volume movement, could conceivably produce enough traffic to cover initial terminal overhead. Then, with that overhead basically assured, the railroad could move toward chemical traffic "a bit at a time."

• **Step by step.** First step in the study was to find out how much cement producers could afford to pay for transporting their product.

Basic railway statistics, available to the researchers within their own company, gave the answer—a maximum of 28 cents per cwt, or approximately $1 per standard 376-lb barrel.

Beyond that figure there was no cement moving by rail, regardless of distance.

At just about that time, however, the Atlantic Cement Company was putting into operation a big, new, highly automated cement plant at Ravena, N.Y., some 10 miles south of Albany. This was showing substantial production savings as compared with smaller, older plants.

Putting all the figures together, the

Flex-Flo: What it is; how it works

Flexi-Flo, says the New York Central (which developed it), "is a new cost-saving method of transporting bulk commodities direct from factory to customers.

"It does away with need for barrelling or packaging; saves shipping time; eliminates terminal investment by shippers or receivers, and reduces distribution costs."

Its basic secret lies in combining the advantages of long-haul, low-cost rail movement with those of short-haul, final-destination delivery by truck, with railroad and trucker working closely and cooperatively together.

To date, the service has been used principally for cement and dry chemicals, but it is equally suitable for a wide variety of flowable bulk commodities, especially those where contamination-free shipping is essential. Such goods might include, beside cement and chemicals, detergents, fertilizers, salt, borax, lime, flour, sugar, feed grains, starch, malt rice and barley and some liquids—corn syrup, for example.

Any of those (and others) may move, depending on individual circumstances, in railroad or shipper owned or leased covered hopper cars, tank cars, or the special "pressure differential" Flexi-Flo cars developed by the Central in cooperation with just about all major car builders. Of the "PD" class, NYC currently owns 224; some 200 more are owned or leased by other railways or shippers.

Trucks used for terminal delivery are all special contamination-proof vehicles.

● **Operation.** In actual shipping between NYC origins and destinations a car is loaded at the shipper's plant and moved by the fastest available route and train to the rail terminal nearest its ultimate destination. There a special Flex-Flo tractor-trailer pulls alongside; the driver connects hoses on car and truck; turns on a truck blower, and transfers the lading between the two vehicles. The process is rapid; because the air pressure in the car is greater than that in the truck body, up to 25 tons of cement may be transferred in 10 minutes.

Because the transfer is direct, and uses air supply from the truck, the rail terminals can be relatively simple and inexpensive—little more than conventional sidings with no air supply, conveyor systems or storage bins.

Presently, NYC maintains Flexi-Flo terminals at Beacon Park (Boston), for chemicals; Framingham, Mass. (cement); North Bergen, N. J. (chemicals, cement and foodstuffs); Syracuse (cement); Rochester (cement and chemicals); Buffalo (cement); Charleston, W. Va. (cement); Indianapolis (cement); Hammond, Ind. (chemicals); and Louisville (cement and dead burned magnesite). A chemical facility is soon to be opened at Cleveland, and additional terminals are in the planning stage.

The truckers who handle final deliveries are arranged for by the railroad—two at each point, to insure good service. But a shipper deals only with the rail carrier.

Both rail and truck transportation are billed to the shipper at regular rates. There is a small charge for transfer of some commodities between the two modes of transport—eight cents per 100 lb for dry materials and six cents for liquids. There is no transfer charge on cement, however, because on that, one single joint through rate applies on the entire rail-highway movement.

There is a modest charge if a railroad-owned car has to be held in a terminal for more than a single day. On shipper-owned equipment there is an allowance of two days free time, and thereafter a charge of $1 per day.

Such hold-overs are sometimes inevitable. A 125-ton Flexi-Flo car carries five truckloads of cement; receivers in even a relatively large area can't always take that much from one supplier on a given day. And chemical shippers sometimes hold cars deliberately, because the cars offer cheaper and safer, i.e., more contamination-proof, storage than anything the shippers themselves can provide.

railway marketers decided cement producers could, and probably would, pay up to $1.50 per barrel for transportation which would include truck delivery to final destination.

To confirm that estimate, they "began to ask questions," and found that some producers were actually absorbing as much as $1.25 per barrel in transit costs in order to compete in certain markets. "So," says Hohorst, "we decided our $1.50 was well in the ball park."

● **Cement industry changes.** While all this was going on significant changes were taking place in cement marketing.

For one thing, the ready-mix people—major customers for all cement producers—were decentralizing their operations. An increasing percentage of their deliveries were being made to highway or suburban housing projects, or similar off-rail locations. It was becoming burdensomely costly for the ready-mixers to maintain their own plants with big silos, and conveyor systems from cars to silos, silos to batching bins and batching bins to ready-mix delivery trucks. Maybe, they began to feel, they could do as good a job more economically with smaller decentralized plants, limited to batching bins served direct by trucks but without silos or costly conveyors.

There was, though, one thing the ready-mix people could not do without—delivery of cement at specified points at specified times. And only trucks could provide that at all the points and times in question.

Long-distance trucking, on the other hand, was proving to be a costly and often erratic proposition for producers.

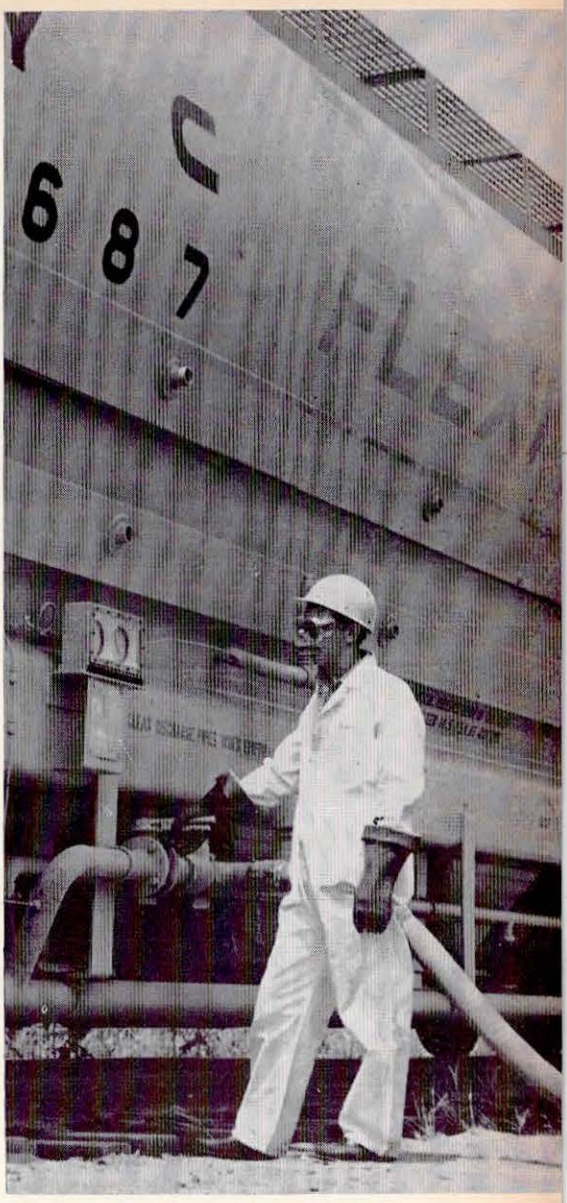
So they, in turn, began to build silo-type distribution terminals in local areas, with the double object of meeting ready-mix needs and avoiding long-haul trucking.

Such terminals could do the job for high volumes—but the volume was not always high enough to justify the terminal costs. This became especially true as unit costs—of labor, for example—went up; and as construction of more terminals led to over-saturation of a given market area.

Compounding all this was the fact that, not too long ago, cement mills serving the New York-New Jersey area were operating at only 72% of capacity, instead of their economic base of 80%. This led to a drop to about $2.80 per barrel in delivered price. With terminal costs reaching as high as $1 per barrel, and truck delivery beyond running to 35 cents at least, this left the mills a far-too-low $1.45 per barrel to make the cement and deliver it to their regional terminals.

OPENS NEW MARKET AREAS

Flexi-Flo allows cement manufacturers to market competitively up to 700 miles from plants, says J. G. Sweet, NYC's freight sales manager—building materials.



GIVES FULL PROTECTION

Special work clothes emphasize how Flexi-Flo safeguards chemical shipments.

• **"Pressure differential" car.** While these marketing changes were taking place, the Central had been quietly developing its "pressure differential" car.

That was a joint effort between the railroad and major car builders, among them ACF, General American, North American, Union Tank, and B. F. Goodrich.

The result is the car which is at the heart of today's Flexi-Flo cement operations. It is not the only car used; conventional covered hoppers and tanks can also be used. And the present "PD" unit, NYC men emphasize, "may not be the ultimate, but it's a good workable design."

• **Selling.** That's when the Central began to sell the concept of Flexi-Flo. Fortified by its studiously researched knowledge of cement industry problems, economics and transportation needs, and with plans and equipment for solving them, it could say to a potential shipper:

"If you ship through a New York Central Flexi-Flo terminal you have no investment, no risk. Your savings in terminal cost will permit you to ship over a wider area and to serve expanded markets. Your shipments won't be mixed with those of any other producer, because the cars you ship will be available only to trucks serving your own customers. The cars and trucks will protect your products from contamination. And there will be no delay in unloading; no waiting to use a conveyor, because each car and truck together make up their own conveyor system."

The selling, and the equipment and knowledge which back it up, have worked. As related on page 38, the Central's Flexi-Flo cement traffic increased about seven times in the three-year period 1964-66—and this year it is expected to show still another gain.

The same factors—good over-the-road service; the right contamination-free equipment; simple but efficient and economical terminal facilities; and sound selling backed by knowledge of the industries served—are beginning to pay off also in chemicals, foodstuffs, and similar products.

The same market research and logistics planning techniques, differing only in detail, have paid off on other products as well—new automobiles, grain, steel, for example. And Central thinks the results, on those products and others, are only beginning to show. ■

JUST BACK from an inspection trip to the Orient, Milwaukee Road's George H. Kronberg (seated), vice president-sales and service, and P. Laurin Cowling, assistant to the president, explain to Railway Age Senior Editor Gus Welty how planned improvements at Japanese ports will help build containerized import-export traffic.

What's ahead for Far Eastern trade?

Western railroads have been involved with the Orient since before the turn of the century. But the interest in import-export trade with Japan and other Far Eastern producing centers and market areas has never been higher—particularly in view of the promised expansion of containerization in the trans-Pacific trade. Milwaukee Road's George H. Kronberg, vice president-sales and service; P. Laurin Cowling, assistant to the president and vice president of Milwaukee Motor Transportation; and W. Edward Cartwright, assistant to the vice president for import-export traffic, are fresh from an inspection trip to the Far East. Here, in conversation with Railway Age Senior Editor Gus Welty, Kronberg and Cowling tell what they saw—and how they think the import-export market will develop.

Q. How would you assess the near-term traffic potential in containerization between the U.S. and the Far East?

KRONBERG: There's no question but that it's going to go—it's going to be successful. But it's going to take time to get there. The Japanese themselves, in talking about building container ships, estimate that it will be perhaps four or five years before the ships will be traveling at full capacity—which might be 700 to 900 containers. First, the whole concept of containerization has to take hold, here and in Japan. And it appears now that the Japanese may be relatively slow in adopting it.

Q. What percentage of import-export traffic moving between U S. ports and Japan is containerized—or susceptible to container movement?

KRONBERG: It's been estimated that 70% could be containerized. But there are certain things overseas that will work against containerization. For instance, the Japanese have a port system that's quite unusual, if you're used to our methods. You'll see dozens and dozens of ships tied up out in the harbor—and they're loaded and unloaded by lighters. You'll see far fewer ships tied up at docks—and even these ships will be worked from the water side, not from the dock side.

Q. How about the land-based support facilities?

KRONBERG: New piers will be needed. But more than that, you have the likelihood that containers still won't move inland—which means that freight will probably have to be trucked to and from the port, and containers will be loaded and unloaded at the port itself. The Japanese realize that the efficient way would be to use the container all the way, from shipper's dock to port and onto the ship, or vice versa. But they have their dock problems, and they have highway-building problems. The kind of door-to-door containerization we know here is going to take some time to develop there.

Q. What's your guess as to how fast these developments will come?

COWLING: Japanese business people and the people who run the steamship lines seem to feel that in five years they'll have containerization programs well under way. And then—with new and rebuilt highways serving manufacturing areas—they'll be able to handle containers as we do.

Q. How many major ports are likely to be developed?

COWLING: Two, to begin with, and three, ultimately. Kobe and Yokohama have been recommended by the Ministry of Transportation. At Nagoya, they're going ahead on their own, and they're hoping for some assistance from the government.

Q. What kind of role will Japanese railways be playing?

KRONBERG: Not much of one, at least not for a while—because the real industrial areas are all located close to the ports, and this makes truck service attractive.

Q. How about the role U.S. railroads will be playing. For instance, are you planning to open a traffic office in Japan as several other roads are?

KRONBERG: We've just about decided that we will—but I don't think we're going to be in any rush. We want to evaluate things. I think we've got to go back to Japan, probably in six months or so, and make our determination then. Actually, I think the Milwaukee right now is fully equipped to handle any and all containerized movements to and from the Far East. We're experienced—all North American roads are experienced—with this kind of traffic. Containerization is, after all, really a form of piggyback. And when the full development of the concept comes

New business means new equipment

STARTING IN SEPTEMBER, Santa Fe will be taking delivery of 200 89-foot dual-purpose TOFC/COFC flat cars built to General American's new design. The ability of the cars to handle trailers or containers or a combination, says Santa Fe President John S. Reed, "will give added versatility to our piggyback service. This should prove especially invaluable in connection with our growing import-export service to and from Hawaii and the Far East, much of which moves via container."

The Milwaukee Road sends three top officers to the Orient on a fact-finding and business-building trip.

Union Pacific calls the operations of its new traffic office in Japan "excellent."

Northern Pacific keys its current national business-magazine advertising to the line "We get your freight to the Orient two rising suns sooner."

Santa Fe announces the acquisition of dual-purpose flat cars with the specific note that they'll be "especially valuable in connection with our growing import-export service to and from Hawaii and the Far East."

Great Northern's newly-organized marketing department will be attempting to build upon GN's long associations with the Orient trade.

Southern Pacific's top officers were recently in the Far East, and SP is set to build on an already-substantial volume of traffic through the ports.

● **Looking for business.** Other western roads, many of which don't serve the Pacific ports directly, are also working to find ways of participating in what will be an increasing trans-Pacific trade.

Union Pacific, first U.S. road to open a traffic office in the Orient, has better than six months' experience to draw on now. And, says President Edd H. Bailey, "interest generated to date has more than lived up to our expectations."

Thus far, the efforts of UP's Tokyo office have been largely educational. The man in charge, James R. Joh, was already well-known in Japanese shipping and trading circles and in those governmental areas concerned with foreign trade. Now, working with a local public-relations consultant, he has initiated an external house-organ designed to familiarize potential customers in Japan with railroading U.S.-style — especially with those U.S. practices involved in routing and freight handling.

UP President Bailey points out that the Japanese "are currently very interested in the market potential of the Midwest, both for their own products and as a source of supply. We're seeing a steadily-increasing trade flow with Japan and the Orient. And we expect the recent Kennedy round of tariff reductions to have a very beneficial effect on this trade."

As matters stand, UP is planning to expand Joh's staff. It's also considering appointment of additional traffic representatives in Asia. And over the past year, it has enlarged foreign-freight activities in the U. S.

● **New cars, new devices.** Meantime, western roads are also moving ahead with equipment developments designed at least in part to fit in with the concepts of import-export containerization.

With one eye on the overseas traffic and the other on the need for flexibility in domestic TOFC/COFC movements, Santa Fe ordered 200 89-foot dual-purpose flat cars from General American. The car design is the one developed by GATX for test by Trailer Train and its member roads. And Santa Fe, in making the $3.5-million purchase, is calling the units "the first dual-purpose piggyback cars to go into regular service."

Union Pacific's new-equipment developments are moving in a slightly different direction—toward the outfitting of standard flat cars for container service.

UP is adopting a stake-pocket pedestal tie-down system which makes use of cams and pins to secure a standard container to the stake pockets of an ordinary car without the need for blocking or other anchoring or for alterations to the car itself. The tie-down design, UP says, will permit loading and locking of a container in two to three minutes' time.

One big factor in UP's thinking is car supply—and the fact that "using these devices, we can assure container shippers of adequate car supplies from our fleet of standard 53½-foot flat cars." In a recent demonstration at Oakland, Calif., containers arrived on an articulated car, two 53½-foot units permanently coupled. As UP puts it, "this is a 'long' car that can negotiate port trackage and enable us to offer single-car rates."

In addition to its traffic and equipment moves, the road is also looking hopefully at rate developments. And the adoption of Tariff 21-D, Reduced Rates on Imported Container Cargo, UP declares, "should encourage intermodal container shipping."

"The U.S.A. could be used as a land bridge"

about in Japan, it's just going to add to the tremendous volume of this kind of business we're already handling.

Q. How about the physical facilities on this end. Are West Coast ports adequate to handle increasing business?
COWLING: Port officials at all of the West Coast points are in one of three positions: They have container-handling facilities, they're building them, or they have rather elaborate plans for them. We're primarily interested, of course, in the North Coast ports—Seattle, Portland, Tacoma, Longview—and all of them are moving ahead with planning or construction.

Q. Seattle, Tacoma and Longview, yes. But Portland?
KRONBERG: Well, we have hopes of being in Portland one of these days—and we will be, if the Northern Lines merger is approved.

Q. You've mentioned the short land-haul problem in Japan, so far as railroads are concerned. What do your marketing studies show, as to the rail-haul potential in this country?
KRONBERG: We're inclined to think that the bulk of the tonnage will originate or terminate, generally, in the midwestern area—although, of course, there will be quite a bit concentrated in the Pacific Coast states, and some originating or terminating in eastern or southeastern territory.

COWLING: We're convinced that someday the United States can be used as a land bridge—between the Far East and our eastern states and, ultimately, between the Far East and Europe. The economics of the thing will dictate it. We can see a day when steamship lines serving the Orient and Europe might be able to discontinue long-haul service. Instead, they'd shuttle between the Far East and our West Coast. Railroads would handle the traffic across the continent. And the ocean carriers would take over again for the movement between Europe and our East Coast. We talked about this to many, many of our contacts in Japan. Some of them thought we were really far-out—but some of them thought we really had something.

Q. How do these economics work out in time or money?
KRONBERG: Well, transit time by ship between the Far East and our East Coast via the Panama Canal is about 22 days. When the new container ships go into service, they'll make six days between Kobe or Yokohama and Seattle. Add maybe five days for the rail haul, Seattle to New York. That's 11 days—half the all-water time. Then, you have to consider capital costs. And if you have ships shuttling between Japan and the Northwest on the schedules they're planning, you need a lot less investment in ships to handle the traffic involved than if you were sending everything through the canal and on to New York or Philadelphia or Baltimore.

Q. What kind of timetable are the ocean carriers working on, for increasing service?
KRONBERG: Matson Lines expects to be in business this autumn with two ships—and this will be their first venture into the Orient trade. The Japanese steamship lines figure to have their first container ships ready in about a year after that.

Q. But Matson operations are California-based. . . .
KRONBERG: We understand that initially they'll start service to and from California. We don't know if they've made a decision on serving the Pacific Northwest. But one day, we believe, the North Pacific ports will come into their own. By location, they offer the advantages of one day's saving in ocean-transit time. And, with California ports becoming more and more congested, it's our thought that we can save a second day in the terminal handling—getting containers unloaded, reloaded on rail cars and rolling.

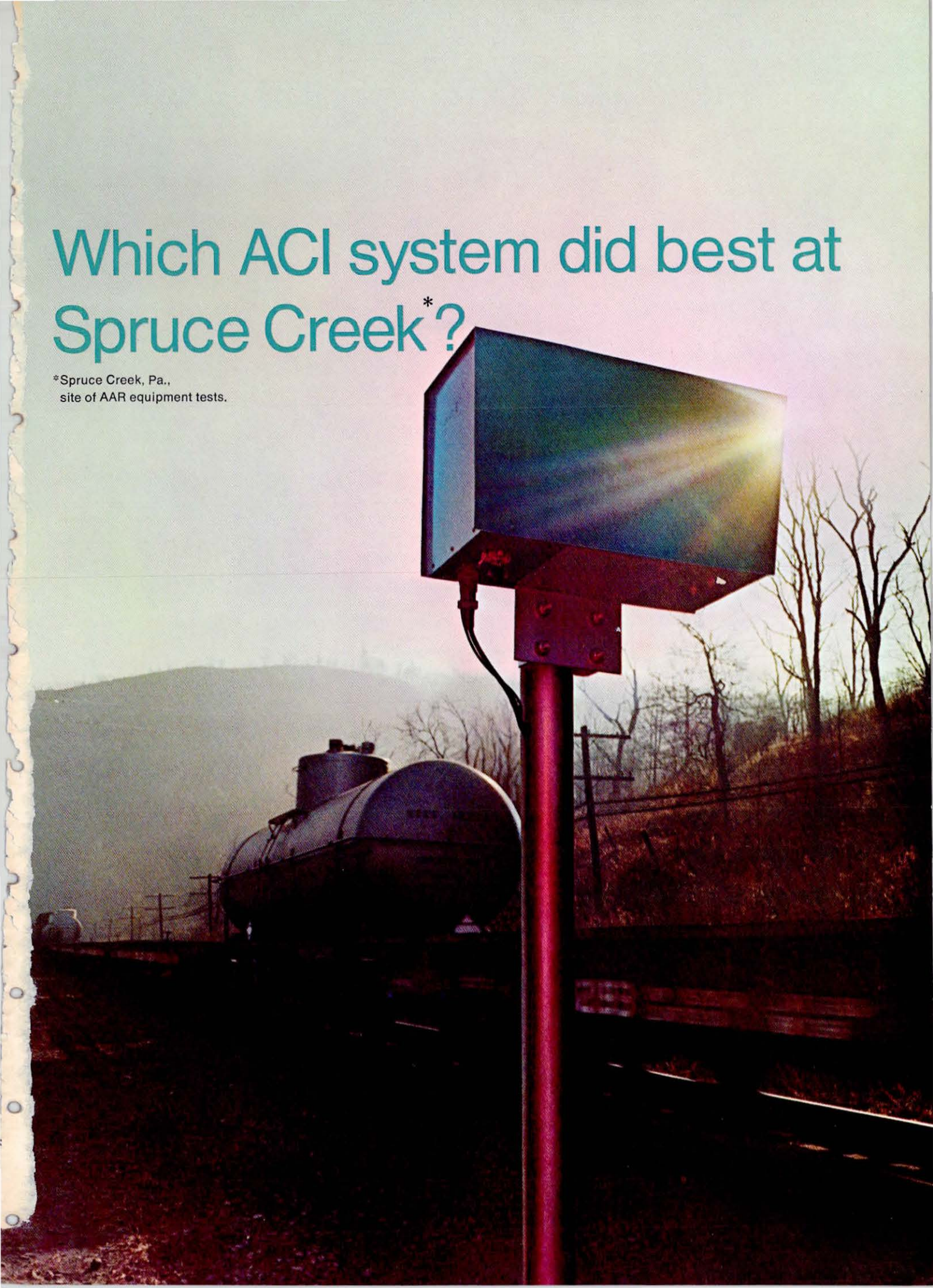
Q. What kind of import-export terminals do you envision?
COWLING: Here, we go contrary to some people's thinking. When you talk about large-scale containerization, you're talking about all-container ships, or maybe you're talking about combination ships carrying 200 or 250 boxes plus bulk cargo or general cargo. You've got a great potential for unit-train handling—because with shiploads of this magnitude you'll have enough containers destined for common inland points to make fast unit-train operations economically feasible. That's on import business. It may be tougher developing movements like that on the export side, but that, too, may come. Meantime, though, you've got to have some no-delay way of handling containers between ship and railcar—and we don't believe you can do a direct transloading job at pierside.
KRONBERG: "We've expressed this opinion to port officials, and they seem inclined to agree. You can put tracks at dockside—but if you try to direct-load or direct-unload, you're going to have a terrific amount of congestion. Our concept is that containers that are pulled complete for destination will be trucked to a rail yard that's nearby, but out of the immediate port area. This is pretty much the basic philosophy that Matson is following. And for containers loaded with small shipments for a number of destinations—well, here a consolidator of some sort might have to take over, break bulk and then restuff containers for particular destinations.

Q. How will the railroad handle the boxes?
COWLING: In our particular operation, we look at a container as a vehicle, much the same as a piggyback trailer. For ease of operation, to begin with we'll operate all containers on our railroad with wheels attached. You do need wheels at origin and destination—and if you run wheeled containers on flat cars, you eliminate the need for cranes or other special loading-unloading equipment at many points where the volume of business just doesn't justify expensive support facilities. For two or three years—until we see how the volume builds up and until we see how new-equipment development shapes up—we'll probably stay close to a conventional piggyback-type operation.

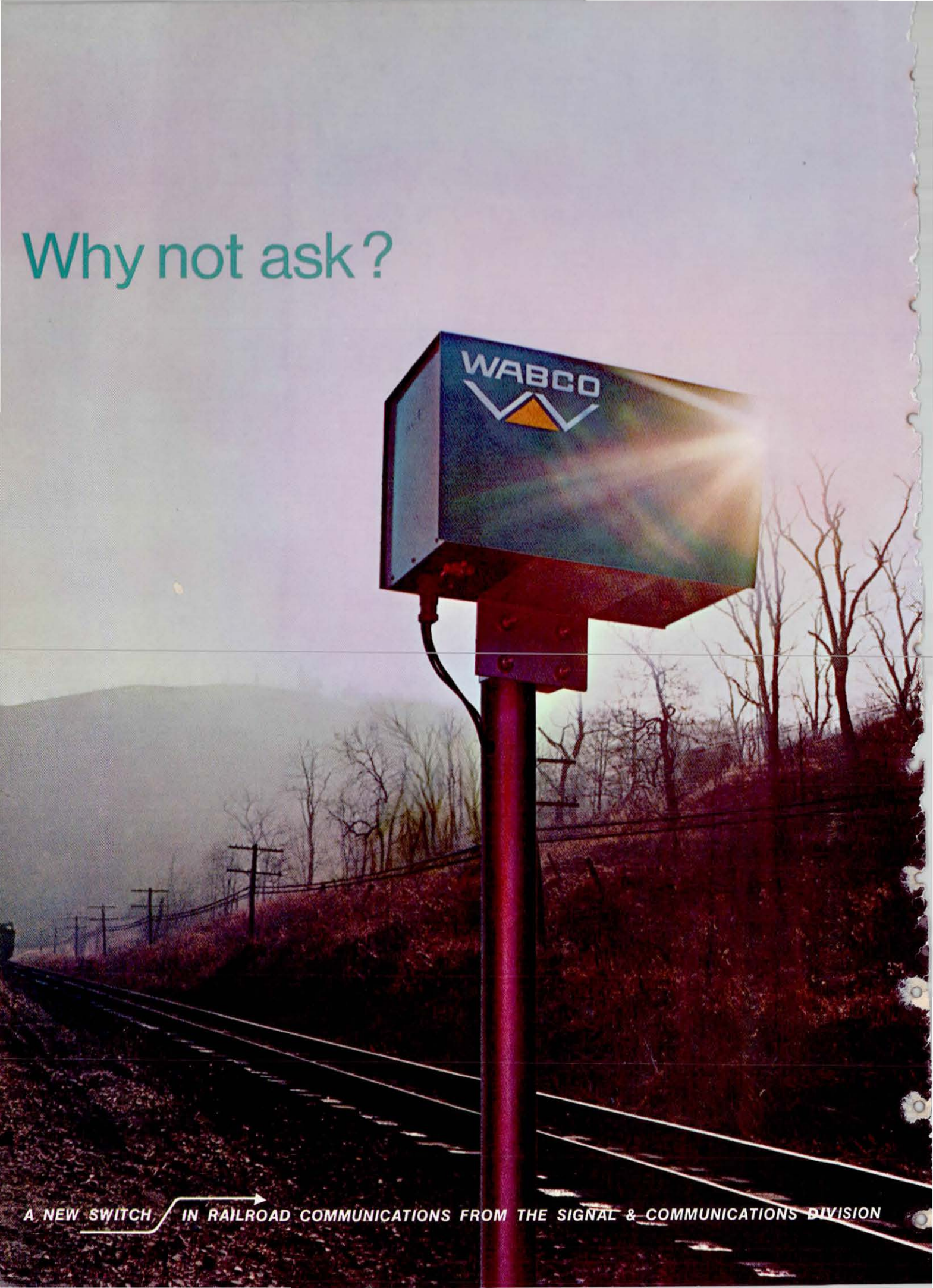
Q. Generally, then, you're looking for the boom in import-export container traffic as an extension of what you're doing now, with maybe a few new twists—such as the solving of port terminal problems, and the bridge use of railroads.
KRONBERG: Japanese newspapers, while we were over there, were kind to our mission—and sooner or later they usually mentioned our silk trains, and the fact that we set up an import-export department in 1921. We're sure not moving much raw silk now—but we've got traffic in cameras, electronics equipment, porcelain, ceramic tiles, toys, even artificial flowers and Christmas tree ornaments. And a lot of other things. We've been in the Orient trade a long time—as both we and the Japanese well know. Containerization of the import-export trade is the next refinement of the trade—and it could be the big one. ■

Which ACI system did best at Spruce Creek*?

*Spruce Creek, Pa., site of AAR equipment tests.



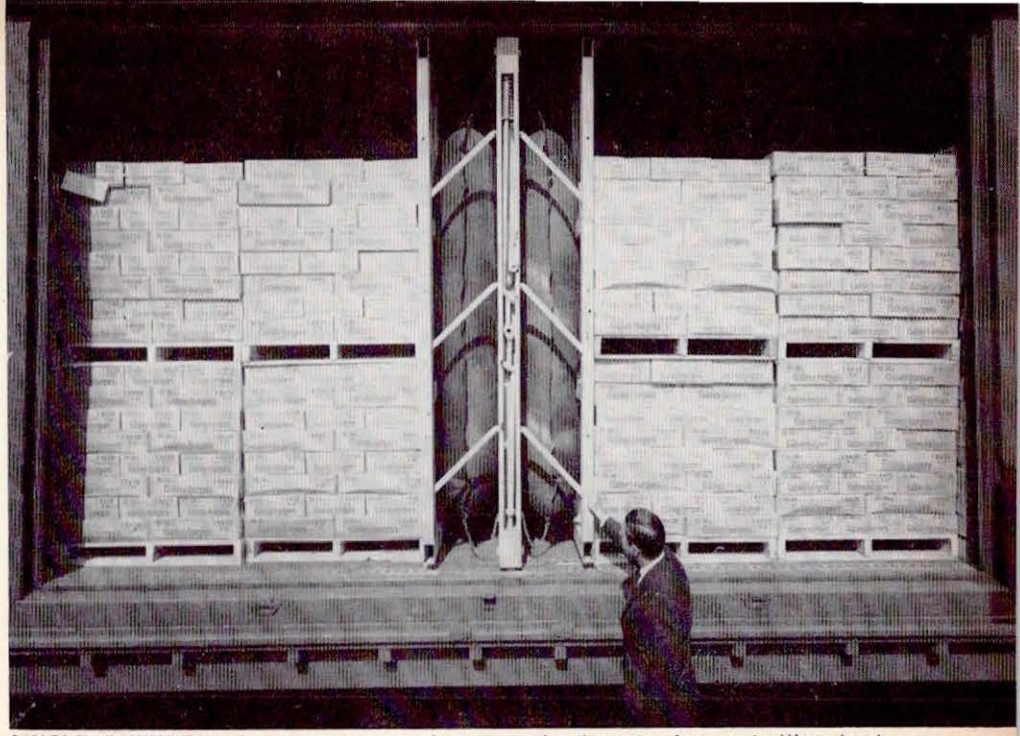
Why not ask?



A NEW SWITCH IN RAILROAD COMMUNICATIONS FROM THE SIGNAL & COMMUNICATIONS DIVISION

This bulkhead cuts food damage

Traffic research produces unit which will be handled by Evans.



SINGLE BULKHEAD in doorway area has proved adequate for controlling loads. Impact tests with doors open failed to dislodge any of the car's lading.

"Avoid the voids" could well summarize the conclusion of General Foods traffic research which has led to development of a new way for improving rail handling of fragile food products. The resulting box-car bulkhead has cut lading damage by more than 50%, compared with GF loads moving in cars that have more conventional load-restraining devices.

At the heart of the new bulkhead, literally, are four air-inflated bladders which maintain a load under constant pressure so that no damage-producing voids can develop. GF has tested its pressurized load-control system with a variety of its own products in containers ranging from small (0.2 cubic foot) to large (2.5 cubic foot). In every case, these packages were unitized on standard (48- x 40-inch) wood pallets.

● **Must be something right.** So impressive have been GF results that Evans Products, developer of DF crossmembers for load restraint (in 1948), has acquired manufacturing and marketing rights for the pneumatic bulkhead. Evans' tests with its prototype bulkhead in a Southern Pacific box car recently confirmed earlier impact work which was initiated by General Foods.

Eight cushion-underframe grocery cars fitted with the bulkhead and owned by the Norfolk & Western and the Pennsylvania have been assigned to the General Foods service, some now for as long as ten months. Five Rock Island cars are just joining this pool which moves between GF plants and its 20 distribution centers across the nation.

● **What the customer wants.** "Our line is always eager to pioneer significant transportation innovations," says A. F. Hatcher, RI traffic vice president. "Because freight load control is of singular importance to us, and also our customers, the cars being supplied to General Foods are a significant first step toward implementing a new system which has great potential to reduce freight losses substantially."

Although General Foods is not in the business of building cars or car components, Robert A. Stringer, general manager of GF's corporate traffic department, credits railroads with a key role in maintaining and improving the firm's over-all operations. "The quality and price of product on a store shelf depend not only on raw material and labor costs," he says, "but on the effectiveness and cost of transportation from farm to factory, factory to warehouse, and warehouse to store."

● **The cost of damage.** "Freight losses are costly to railroads and also to a major rail user such as General Foods which moves more than a quarter billion packages of food through its distribution system every day," adds Stringer. "Damaged freight, which could result in a product being out of stock, affects every one in the food distribution cycle: our company, the food wholesaler and distributor, the retail store and, ultimately, the shopper."

GF underwrote research on the pneumatic bulkhead to develop, for mutual benefit, a system railroads could use to control costs and improve food product handling. Damage claims for all food products in 1965, reported by AAR, topped $15 million.

● **More than food products?** After having found the pneumatic bulkhead so successful in handling a wide range of food products in standard grocery cars, GF reports that the system's potential for other types of freight still remains to be explored. Tests recently conducted by Evans were also with food products.

TEST LOADS were checked at origin and destination in assessing bulkheads designed by J. M. Carter (left), manager of General Foods' Transportation Research and Development group and D. Butler, transportation research analyst.

The single bulkhead is designed to replace the mechanical restraining devices used in conventional load-control systems: standard bulkheads, bars, side fillers, and separate dunnage used to fill voids in loads. The new unit is actually two bulkheads in one—a steel center unit on each side of which are two of the 100- by 45-inch fabric-rein-

LUTHER MILLER

AS THE EDITOR SEES IT...

A PLAGUE FROM THE SKY—"Having checked with our media department and learned that you are the leading rail magazine," writes a Madison Avenue advertising executive, "I would like to make as loud a squawk as I can to your readers—the railroad people—for their pusillanimous failure to distinguish between us railroad regulars and the Fly Boys every time there is a big storm and the planes that are supposed to laugh at weather are off at some airport giggling nervously on the ground.

"At the first sign of approaching bad weather, the Fly Boys' secretaries descend on the railroads like a cloud of locusts. And when they're gone, so are all the bedrooms and low number roomettes—leaving me Roomette 10 over the wheels. Then the Fly Boys descend on the train and all the seats in the club car and diner are gone. What a lark! The Fly Boys are slumming! 'Where are the safety belts?' they quip.

NO 'EARNED POSITIONS'?—"The diner is where it gets us railroad regulars most. 'Say, this isn't bad!' the Fly Boys admit as their variously rare, medium and well-done steaks come in. 'Not bad at all!' What a generous concession to the railroads!

"Then I have my regular vision of all these Fly Boys huddled shoulder to shoulder in their little airplane seats, knife and fork held close together to avoid poking the next guy with an elbow, slicing away at their mini meals on their mini trays. A steak dinner in the roomy diner 'not bad' indeed!

"In my business, advertising, we used to have 'earned positions' in magazines. This meant that if you'd advertised a lot in the POST, say, you'd get a better position in the magazine than someone that hadn't. How about some such distinction as this between us railroad regulars and the Fly Boys?

"It would sort of amount to choosing up sides, I'll admit. But haven't we chosen up sides already? All I'm saying is that, when our side is obviously winning at the moment and nothing can get off the ground, the other side shouldn't be able to switch sides and—outnumbering us as they do—virtually kick us out of our Pullmans.

"I know that most railroaders want the railroads out of the passenger business. Be that as it may, I would rather see the railroad passenger service for railroad people go down with all flags flying than to have the flags drooping and the Fly Boys wiping their feet on them whenever they want. In case you think I'm serious about this, I am."

BETWEEN THE LINES—The letter quoted above is worth a careful reading, and a thoughtful re-reading, by everybody concerned with the railroad passenger business. It suggests, for one thing, that there remains a substantial market for first-class railroad travel.

Flying used to be a status symbol. It isn't any longer. The statement, "I came out on the 'Broadway,'" carries a lot more snob appeal these days than the frequently-heard sigh, "I bumped out on United." Pullman travel today is for the man who has made his mark in the world, and now has the time and the money to go first class. Why not advertise it that way?

Such a campaign might help to correct the thinking of those who believe that "most railroaders want the railroads out of the passenger business."

Most railroaders we know want the railroads out of the *unprofitable* passenger business. But the public (reading only the worst about passenger trains in the news columns, and seeing precious little about them in the advertising columns) doesn't make this distinction—and the railroad image darkens.

forced rubber dunnage bags that, in turn, are protected by steel panels which form the load-bearing surfaces of the entire assembly. General Foods worked cooperatively in the later stages of developing the pneumatic system with Air Bulkhead Car Corp. which independently had developed a different type of air bulkhead several years ago (RA, Dec. 23/30, 1963, p. 34).

• **Ceiling mounted.** The bulkhead, suspended from an overhead track, is normally locked at the car's center after the load is in place. The pneumatic system can then be charged from a compressed air source at the shipper's loading dock or with a small hand pump. There is no connection with the car's air-brake system.

Under about 3-psi pressure the bulkhead expands from its deflated 12-in. thickness to a maximum of 40 in. when fully inflated. This presses a palletized load with such firm end-to-end force that there is no lateral shifting, eliminating the need for side fillers.

As refined for production by Evans Products, the bulkhead will incorporate the four-pin locking system used with the DF-B conventional bulkhead. According to Sheldon Kaplan, executive vice president and general manager of Evans' Transportation Equipment Group, many parts of the DF-B will be utilized for the new pneumatic model. Kaplan has indicated that it regards the unit as useful for many types of lading.

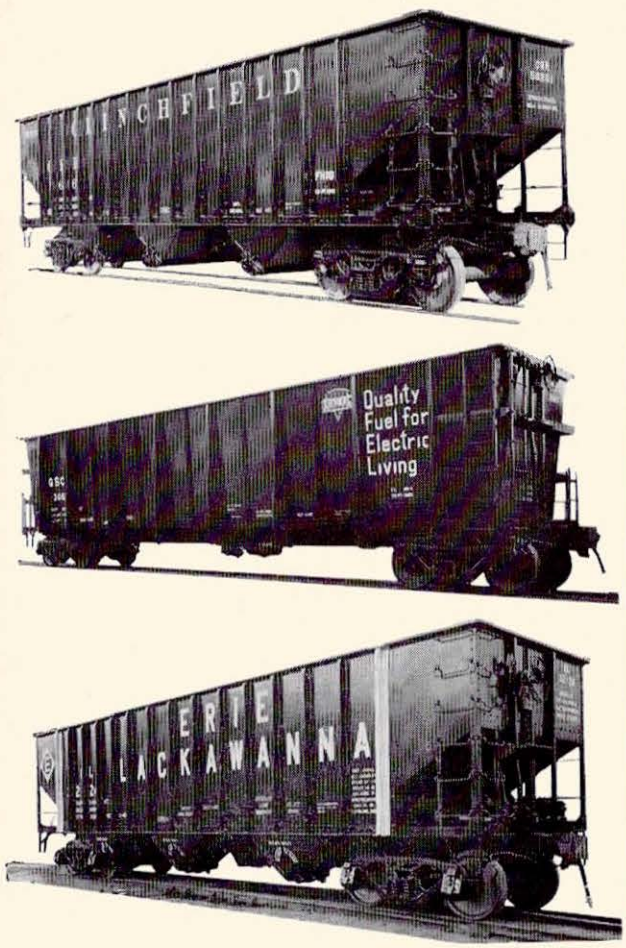
• **Record is good.** The eight cars which have seen thousands of miles of service have racked up an enviable record in their handling of food products. H. W. Jones, GF director of corporate traffic, whose department chose and perfected the pneumatic load control system, says that, when compared with cars having conventional load restrainers, not only has there been a more than 50% cut in damage but there has been a threefold increase in loads which moved with absolutely no damage.

Jones cites some other advantages, such as the reduction in unloading time resulting from tight restraint of the load. It is no longer necessary for forklifts to do any restacking in order that palletized loads may be handled easily and safely out of the car. With the reduction in damage, there is now available warehouse space formerly assigned for salvaging operations. General Foods also finds that the paperwork costs involved in filing claims against railroads has been cut.

From a railroad standpoint, studies indicate that the production model of the pneumatic bulkhead will cost considerably less than a full complement of conventional mechanical load-restraining equipment. ■

By 1975 an additional 80,000,000 tons of coal will move by rail to power companies annually.

Will your car fleet be ready for the job?

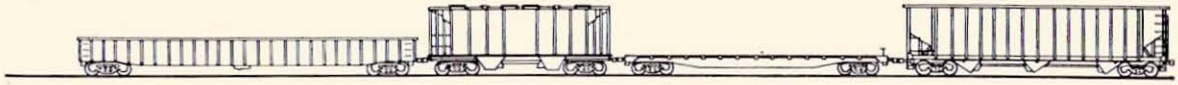


That's the forecast. Even with unit trains and fast turn arounds many more cars will be needed to handle that traffic. Coal hauling railroads are already considering this in their planning. The variety of cars envisioned is reflected in recent Greenville designs:

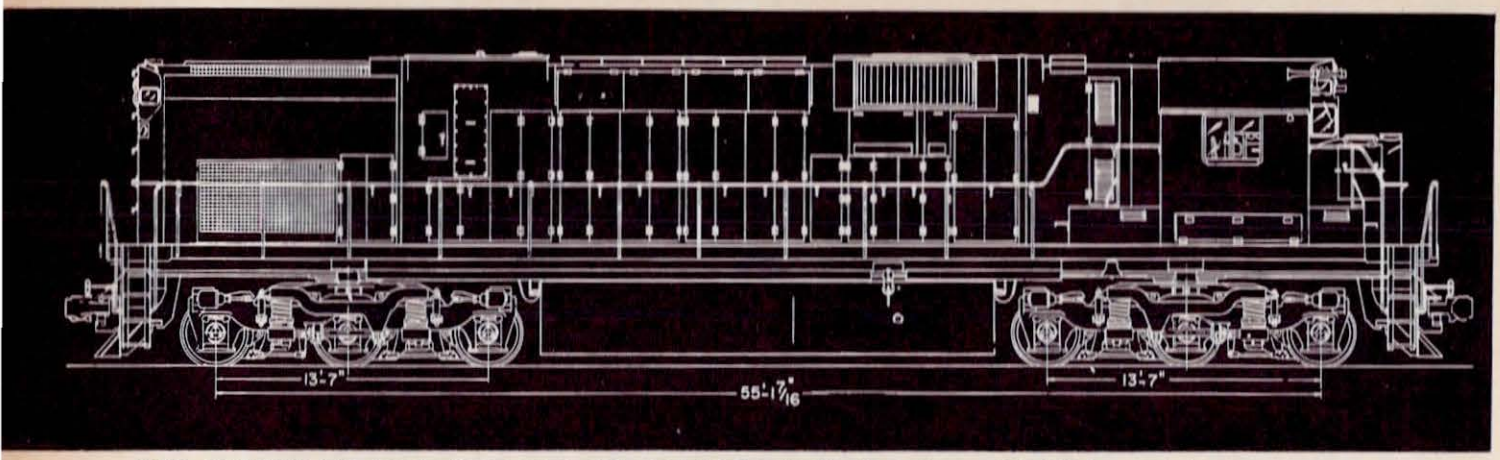
- ☐ **New, high-sided gondolas, some with rotary couplers for unit train service.**
- ☐ **Triple and quadruple cross hoppers for unit trains.**
- ☐ **Bottom dump equipped with hydraulic controlled, longitudinal doors.**
- ☐ **Conventional triple hoppers for general service.**

With new coal fields opening up, more railroads than ever will be involved with this major hauling problem. If your road is one of them, it's time you talked with Greenville. Regardless of your needs, Greenville has the cars for the job. Let's get together and discuss them.

GREENVILLE **STEEL CAR COMPANY**
Subsidiary of Pittsburgh Forgings Company
GREENVILLE, PENNSYLVANIA



Circle 21 on reader service coupon



ALCO CENTURY 636 boosts horsepower while maintaining basic dimensions of 3,000-hp models.

Alco introduces 3,600-hp diesel

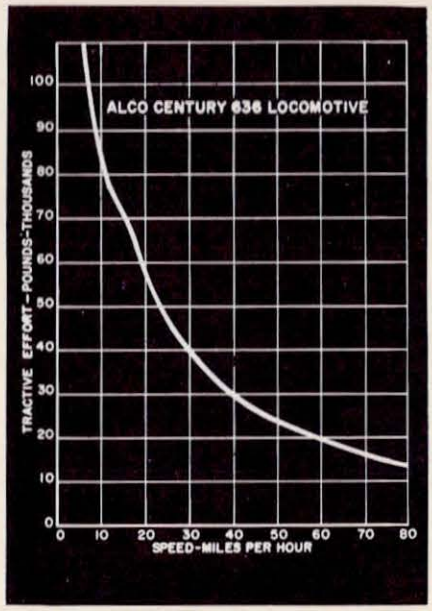
Power goes up 600 horsepower in a single-engine locomotive.

Alco is introducing a new 3,600-hp locomotive, the 636, to its Century line. Previously, the highest horsepower single-engine designs offered by this builder have been the 3,000-hp Century 430 and 630 models.

The additional 600 horsepower for traction is generated without changing the basic dimensions of the Model 251 engine. Besides the higher-rated 16-cylinder engine, the Century 636 will be the first locomotive equipped with a new three-axle double coil-spring truck designed especially for high-speed operation, according to Charles C. Davis, president, Locomotive and Engine Products Division, Alco Products, Inc., a subsidiary of the Worthington Corporation.

● **Engine changes.** Increased power has been obtained through redesign of the air and fuel systems. A new turbocharger produces a 15% increase in the air pressure ratio and after-cooler capacity has been boosted by 20%. Higher capacity injectors have been installed in the fuel system.

Steel-capped aluminum pistons are a new engine feature. They combine steel's greater strength and wear resistance in the piston ring area with the advantages of aluminum's light weight in the piston body. These pistons were tested extensively, both in the laboratory and in service, before being adopted as standard in this engine. In addition, the flow of cooling oil to the piston has been greatly increased. The valve overlap was modified to produce more cooling of the power assemblies.



TRACTIVE EFFORT CURVE shows added pulling power at higher operating speeds. Minimum continuous speed is 11.4 mph.

Bore and stroke remain the same—9 in. by 10½ in.—as in other Model 251 engines. Engine speed of 1,100 rpm is also identical to that of the Century 430 and 630 engines.

● **High-speed truck.** The new truck has been designed to produce adhesion characteristics permitting maximum utilization of the engine horsepower. Other advantages cited by Alco are reduced maintenance requirements and excellent riding characteristics at all speeds.

The truck has a double coil-spring arrangement, allowing the truck frame to have freedom of movement while still providing a stable bolster support for the body. This minimizes the effect of track irregularities and gives a superior ride at all speeds, Alco said. Resilient mounting between the truck frame and bolster is provided by bolster anchors located at the centerline of the axles. This construction minimizes weight transfer between axles and affords higher adhesion by enabling more of the total locomotive weight to be used for traction purposes.

Also contributing to optimum use of power is a modified wheel-slip detection and correction system that is operative at both low and high speeds. The effectiveness of the system, combined with the characteristics of the truck, minimizes the need for power reduction.

● **Supplies increased.** The Century 636, which has the same 69½-foot length as Alco's 3,000-hp units, can be fitted with both a dynamic brake and steam generator if required. Supply capacities have been increased to accommodate 17% more sand and 30% more lubricating oil. Coupled with the optional 5,000-gallon fuel tank, this means longer operating time between servicing, Alco pointed out.

The air brake system includes a high-capacity water-cooled air compressor. The air system for cooling the electrical equipment (including dynamic brake, if used) and for engine intake is combined so that one blower supplies air for all functions. The air for this system is passed through a single inertial filter that can be removed for cleaning from outside the locomotive hood.

Alco said that, throughout the Century 636 design, features have been incorporated to increase reliability and to eliminate or reduce maintenance requirements. For example, lube oil piping has been greatly reduced and simplified and made more accessible. In addition, underframe piping has been segregated on one side of the locomotive and wiring on the other. ■

Sometime, before the car in which it is installed is scrapped because of old age, it may be necessary to replace the oil seals in the Keystone Unit.

It takes about 30 minutes

...other than checking the oil level in the cylinder, NO OTHER MAINTENANCE IS REQUIRED!

Over 34,000 Keystone SHOCK CONTROL Units are specified for service on American and Canadian Railroads

KEYSTONE RAILWAY EQUIPMENT COMPANY

General Offices: 310 S. Michigan Avenue • Chicago, Illinois 60604
Manufacturing: Camp Hill, Pennsylvania 17011

Sales Offices: San Francisco, California • Chicago, Illinois • St. Paul, Minnesota • St. Louis, Missouri • Omaha, Nebraska • New York, New York • Philadelphia, Pennsylvania • Springfield, Virginia • Montreal, Quebec, Canada • Mexico, D. F.

Passenger vs. freight service

(Continued from page 29)

portation, L. E. Galaspie, Richmond, Va. "The fact that passenger service may or may not be available," he adds, "does not sway our routings."

Even stronger on the latter point is W. E. Maley, director of distribution, U.S. Borax & Chemical Corp., Los Angeles: "Any railroad operation functioning at a deficit is a drain on the ability of the carrier to perform services at the most competitive rates. It, therefore, seems logical that, if anything, we should avoid those carriers which perform passenger services at a loss."

A midwestern grain traffic man takes much the same position as Maley. "Where a railroad can prove substantial continuing losses on passenger trains, it is to our well-being that they be allowed to remove this train from service. It is much more important that good dependable freight service be provided. If passenger business is carried at a loss shippers of freight have to subsidize those losses through freight rates."

H. W. Oliver, Newport News, Va., answers in much the same vein; and G. H. Cunningham, GTM, Sterling Drug, Inc., New York, feels emphatically that railroads should not be required "to provide, as in the public interest, plushy, show-case-type, costly, earnings-draining, and publicly ignored passenger services."

● **Impressions.** A substantial number of respondents, while unequivocally disavowing any connection between passenger and freight services, do express some apprehension about discontinuance of the former.

Like Cunningham, they concede that carriers have a right to do it. D. C. Ward, transportation manager, Hoerner Waldorf Corp., Keokuk, Iowa, feels, for example, that "if passenger service isn't patronized it should be discontinued."

Others say frankly that their own company's traveling personnel make few, or no, trips by rail.

The apprehension, nevertheless, exists. It may, in some cases, be termed practical. Certain piggyback movements, which were "outstanding" when trailers were handled on passenger trains, have become "poor" since the trains in question were discontinued, advises one man who asks not to be directly quoted.

More often, the apprehension, though positive, tends to be somewhat theoretical. For example, J. L. Miller, manager of traffic and material services, Birdsboro Corp., Birdsboro, Pa., writes: "Although the fact that a railroad has no passenger service does not influence my routing of cars, I feel sure that poor service and equipment present a very poor image to the public, and influence its opinion of the railroads."

"Even though passenger service has no bearing on our routing of traffic, my personal feeling is that its discontinuance is a mistake," says C. M. Dunn, Jr., manager, Traffic department, Peden Iron & Steel Co. Houston.

W. G. Montgomery, director of traffic, Riegel Paper Corp., Milford, N.J., thinks "too many railroads, believing they will get out from under passenger service, let appearance of both stations and equipment decline. This creates a very poor image, and has, to some degree, resulted in an 'anti-railroad' feeling on the part of the general public. And the general public influences the routing of freight, even if some traffic men refuse to believe it."

"Some passenger advertising might keep a railroad's name in mind when issuing routing instructions for freight," suggests Lee Cisneros, manager, physical distribution, Cabot Corp., Boston.

Other men use their replies to the Poll to express their opinion that railroads have not done all they might have to keep passenger trains in operation, though these men insist this has no bearing on their routing of freight.

"I like to ride a good train, and wish the railroads could find ways to keep more of them running," writes A. M. Ribe, director of transportation, Vulcan Materials, Birmingham, Ala. From nearby Sheffield, J. W. Cassell, district traffic manager, Reynolds, Metals Co., thinks "If some good railroad should take the initiative and provide excellent passenger service, shippers would have a tendency to give that railroad increased business."

G. J. Mason, director, transportation and distribution, Wyandotte Chemicals Corp., Wyandotte, Mich., says he shares the feeling of some of his top management men, "that rail lines lack initiative and imagination in maintaining passenger service, and not exploring methods which could lead to revitalization of a passenger transport system. We feel a service dedicated to passenger travel can be profitable and competitive" —perhaps, suggests H. H. Kohn, Linwood Stone Products Co., Davenport, Iowa, by copying some of the things done in Europe and Japan. Such a system, however, Mason adds, "must be generated by top management, with foresight and responsibility." ■

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Atlantic Coast Line Railroad Company

and

Seaboard Airline Railroad Company

has become effective.

The undersigned acted as financial advisor to Atlantic Coast Line Railroad Company.

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Investment Securities

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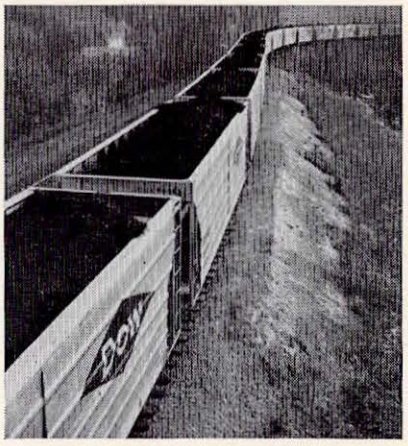
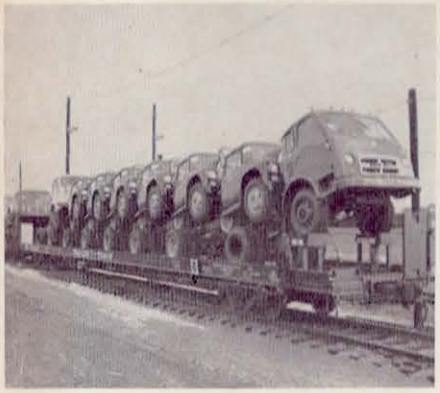


DOW

NEW **PRODUCTS** REPORT



Saddleback Tie Down (RA-1)

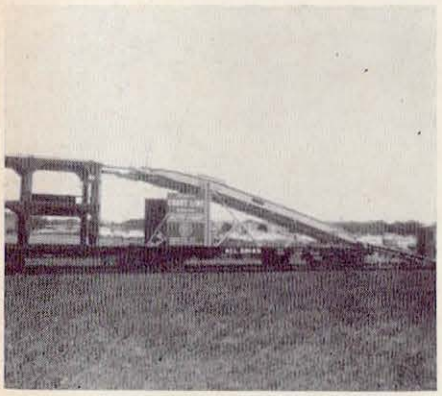
A new Saddleback Load Securement System allows loading of highway tractors on flat cars at less expense and time. A movable saddleback winch incorporates a swivel top which allows the tie down chain to extend in any direction or vertical angle from the anchor point. A stop mechanism stabilizes the winch for loading when winch is facing toward or away from the load. All winches and chains are stored on the car. *MacLean-Fogg Lock Nut Co.*

Dock Seals (RA-2)

With all four edges of dock doors sealed with 14-in.thick polyurethane foam Shop Mule Seats no heat can penetrate trucks loaded with frozen foods, even in torrid climate, according to the manufacturer. The working faces of the seals compress to 4 in. The seals do not sag or become brittle even at 80 deg below zero. If foam is cut it can be restored to original toughness by applying liquid polyurethane with a paint brush. *Indiana Industries, Inc.*

Shipping Covers (RA-3)

Griffolyn, a reinforced plastic fabric, is adaptable for use in covering objects of extremely large or unusual shape such as the 62,000-lb boring mill being covered for shipment from Houston Texas, to Mechanicsburg, Pa. Material is said to be rip proof, waterproof, and resistant to most chemicals. A fire-retardant type may also be had. Fabric can be had in clear or opaque colors. Cost is said to be low enough for one-time use. *Griffolyn Co., Inc.*



Auto Loading Ramp (RA-4)

The mobile flat-car unit, designed in conjunction with railroad engineers, brings a loading ramp, via rail, to any point on the line requiring services for automobile handling. The ramp serves all three levels on a standard auto rack car and is particularly useful at sites where there are no fixed facilities. Ramp car is completely self-contained; a gas-engine-driven generator set supplies electrical power used to raise and lower the ramp. *Page & Page.*

Epoxy Adhesive Putty (RA-5)

A two-tube one-to-one stick form mix, epoxy adhesive putty, bonds to almost any material. Typical setting time at a mid-temperature range is cited as 60-min. at 80 deg. F. When set, the new material may be machined, drilled sawed, tapped and filed.

Suggested application includes repair of lead cable sheaths, insulating bare connections, or sealing leaking transformers. *Crescent Insulated Wire & Cable Co., Inc.*

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7/31/67

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PEOPLE

AMERICAN REFRIGERATOR TRANSIT.—John A. Helm appointed general traffic manager, St. Louis, Mo., effective Sept. 1, to succeed **A. H. Achard,** who retires Aug. 31.

Donald F. O'Brien appointed general agent, Chicago. He is succeeded as general agent, Montreal, Que., by **M. S. Olsen.**

BALTIMORE & OHIO.—C. E. Marshall, Jr., appointed terminal trainmaster, operating department, Central Region, with headquarters at Grafton, W. Va. He is succeeded as assistant terminal trainmaster at Grafton by **P. N. Jarvis.**

F. D. Dreyer appointed assistant trainmaster, operating department, Central Region, with headquarters at Defiance, Ohio.

D. C. Eubank appointed assistant terminal trainmaster, operating department, Western Region, with headquarters at Dayton, Ohio. He is succeeded as assistant trainmaster at Tuscola, Ill., by **R. W. Savage.**

R. L. Harvey, director of labor relations, Baltimore, Md., has retired after 44 years of service.

CANADIAN NATIONAL.—D. H. Grant, assistant regional transportation engineer, Great Lakes Region, Toronto, appointed regional transportation engineer there, succeeding **R. L. Spack,** promoted.

G. Manis, junior methods analyst, Great Lakes Region, Toronto, appointed supervisor-general accounts to succeed **J. C. McDonald.**

F. S. Barker, formerly Montreal Area engineer, St. Lawrence Region, Montreal, appointed engineer maintenance-of-way there, succeeding **J. W. Clarke,** promoted.

Claude Allaire, formerly employment interviewer, Employment Office, St. Lawrence Region, Montreal, appointed assistant supervisor-employment, university and technical recruitment, there.

N. M. Engelman, assistant engineer-bridges, St. Lawrence Region, Montreal, appointed engineer-administration, there.

CANADIAN PACIFIC.—The following appointments have been made in the Montreal Terminals, Atlantic Region: **M. Carle,** deputy general yardmaster, Outremont, replacing **J. L. Rivest,** promoted: **L. Cayer** succeeds Mr. Carle as assistant deputy general yardmaster, St. Luc; **J. Bertrand** replaces Mr. Caver as train yard coordinator, St. Luc, and, in turn, is succeeded by **M. Couture** as pulldown supervisor, St. Luc. **D. W. Reid** appointed dock superintendent, Montreal Wharf, succeeding **J. T. Heffernan,** transferred.

The following appointments have been announced by the freight traffic department: **Thomas P. Maloney,** manager-freight sales, Portland, Ore.: **Gerard A. Roy,** district manager-freight traffic, Portland, Me.; **Kenneth J. Shannon,** district manager-freight traffic, Boston, Mass.; **Roger R. Morin,** freight traffic representative, Boston, and **Charles S. Turcotte,** chief clerk, Boston.

CARROLLTON RAILROAD.—W. R. Hadley appointed vice president, general manager and treasurer, to succeed **J. R. Parsons, Sr.,** retired. Mr. Hadley was formerly trainmaster, **Louisville & Nashville,** Corbin, Ky.

CHESAPEAKE & OHIO.—D. P. Murphy appointed assistant superintendent-trainmaster, operating department (western region), with headquarters at Peru, Ind., to succeed **F. R. Rice, Jr.,** promoted.

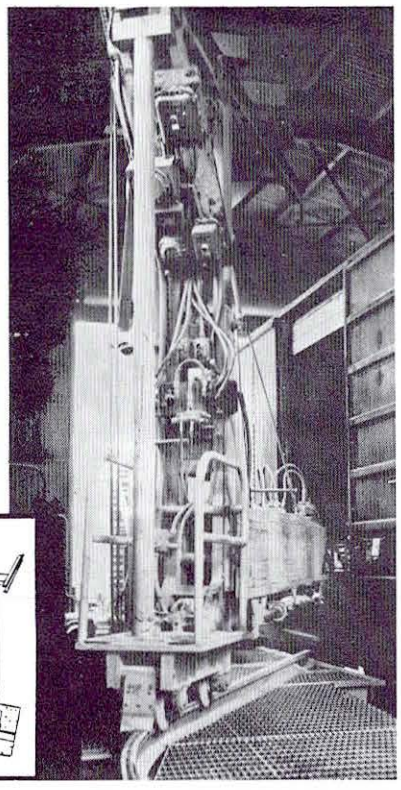
J. H. Workman appointed master mechanic,

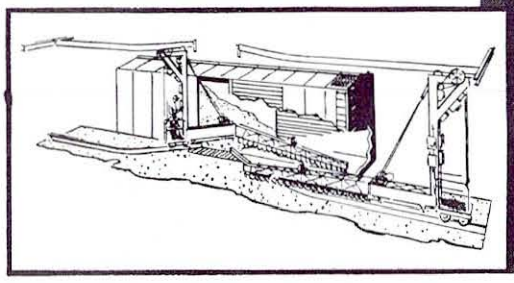
SAFETY SPEED SAVINGS

BY THE CARLOAD

If your problem is unloading incoming bulk materials from boxcars with speed, safety and low-cost — your best solution is an AUGERMOBILE unloader.

Units operate between monorails; works and unloads all standard boxcars. Hydraulic operated boom can be raised or lowered to any working level—easily reaches every corner of car. Mounted headlight provides illumination.





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- **PGH General Purpose Portable Conveyor**
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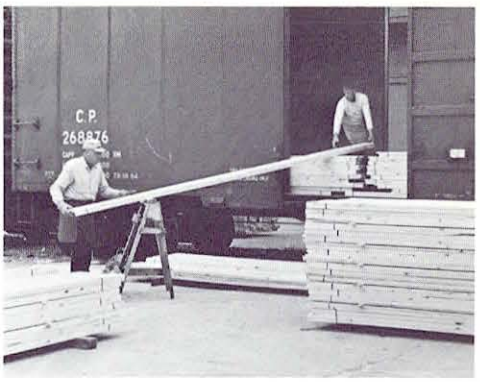
Chicago Heights, Illinois 60411

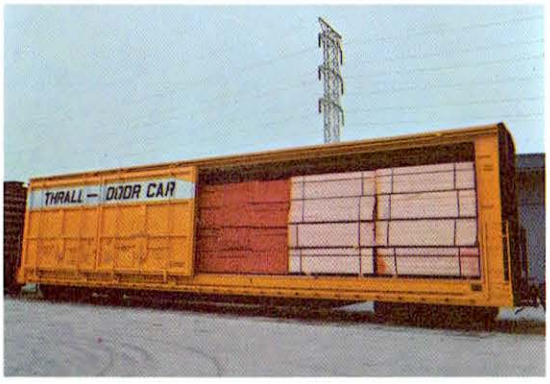
Every lumber load in a "Thrall-Door" car can be loaded or unloaded by high-speed mechanical methods at minimum cost.



Costly manual handling of lumber is necessary with 80% of the boxcars in use today.

Extra long lumber over 16-feet in length (in this instance 2 x 10's 28-feet long) can be handled with speed and economy.

Even 8-foot lumber is difficult to unload from a conventional boxcar with limited door openings.



Full 25-foot openings permit loading or unloading the "Thrall-Door" car in 66% less time. Plug-doors open out and away from car, load shifts can't jam doors.

Cramped 10-foot doors make unloading ordinary cars difficult and expensive.

Cushioning on "Thrall-Door" car keeps lumber load in place with a minimum of tie-downs. Arriving loads such as this can be unloaded mechanically at low cost.

Shifting loads often jam doors, jackstraw and damage lumber loaded in ordinary cars.

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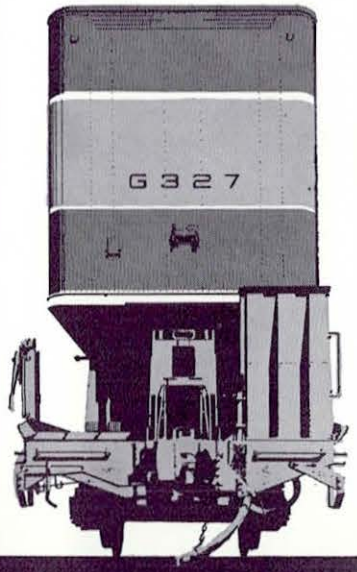

GREAT NORTHERN

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Starr Thomas
Santa Fe

S.R. Brittingham Jr.
Santa Fe

operating department, with headquarters at Clifton Forge, Va., succeeding **G. W. Lushbaugh,** retired.

E. J. Wade appointed assistant trainmaster, operating department (southern region), with headquarters at Richmond, Va.

John O. Dellinger III and **Eric A. Blauert, Jr.,** appointed sales representatives at, respectively, Detroit, Mich., and Buffalo, N.Y. Mr. Dellinger succeeds the late **F. L. Miller,** and Mr. Blauert succeeds **R. L. Segalla,** promoted.

CHESAPEAKE & OHIO-BALTIMORE & OHIO-BALTIMORE & OHIO CHICAGO TERMINAL.—F. R. Rice, Jr., appointed assistant superintendent, Chicago. **M. O. Heavner, Jr.,** named assistant terminal trainmaster, Chicago, succeeding **J. E. Moss.**

CHICAGO & WESTERN INDIANA.—George Moriarty named manager of personnel, Chicago. He will continue to serve as secretary and treasurer.

James T. Medley named trainmaster, Chicago.

CHICAGO GREAT WESTERN.—Paul P. Borsik appointed manager-rates, and **J. I. Metzger,** manager-divisions, both with headquarters at Chicago.

C.I.T. LEASING CORP.—Robert B. Frank elected vice president.

CLINCHFIELD.—W. F. Palmer has retired as assistant traffic manager-sales, Erwin, Tenn., after almost 42 years of service with the railroad.

COLORADO & SOUTHERN.—D. A. Rainey appointed general auditor, succeeding **W. S. Pringle,** who retired June 30 after 47 years of service.

DELAWARE & HUDSON.—F. W. Robbins, track supervisor, Colonie, N.Y., retired June 30 after 42 years of service.

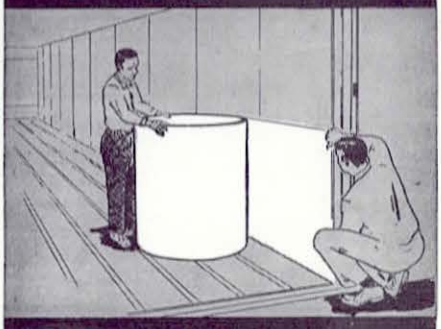
DENVER & RIO GRANDE WESTERN.—J. B. Love named assistant director of planning, and **Robert B. Martin,** system engineer-planning, both with headquarters at Denver.

ST. LOUIS SOUTHWESTERN.—Fred L. Barnes, general freight agent, St. Louis, retired June 30 after nearly 40 years of service. Mr. Barnes' successor is **Robert D. Engelman,** named assistant general freight agent, St. Louis. **Ray E. Caldwell** replaces Mr. Engelman as general agent, St. Louis.

SANTA FE.—Starr Thomas, general counsel, appointed vice president-law, Chicago, effective Aug. 1, to succeed **Jonathan C. Gibson,** who retires July 31. Mr. Gibson will continue as a member of the board of directors. **Smith R. Brittingham, Jr.,** assistant general counsel, succeeds Mr. Thomas. **Thomas J. Barnett** and **C. George Niebank, Jr.,**

GLASBORD®

SCUFF PLATE



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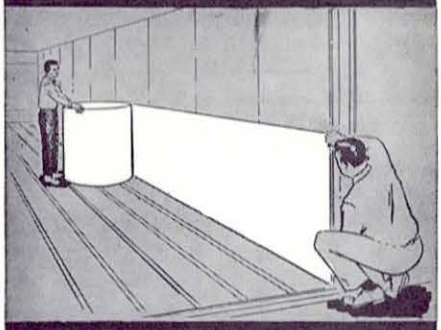
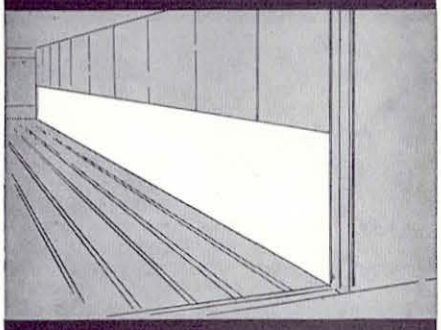


THE LENGTH



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In per diem piggyback trailers, REALCO has *always* been FIRST IN SERVICE.

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Now—REALCO moves ahead of them all to become the *biggest* piggyback fleet of them all—over 12,000 units.

The *first*. The *biggest*. And, because REALCO continues to broaden membership benefits from day to day, The National Railroad Trailer Pool continues as the *best possible source of equipment for profitable piggyback operations.*

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general attorneys, advanced to assistant general counsels.

John Swartz, attorney, named director of personnel development, Chicago.

B. J. Nash, assistant manager, TOFC sales and service, named assistant general freight agent-equipment, Chicago. **C. H. White,** general agent, Indianapolis, replaces Mr. Nash, and in turn is replaced by **R. G. Fenton,** district agent, freight department, Memphis, Tenn.

INDUSTRIAL TRAFFIC

Gayle Johnson has been promoted to general traffic manager for **Burrus Mills, Inc.** He had been traffic manager of the firm's San Antonio, Texas, plant since 1965.

H.T. Raven has been appointed transportation manager, **E.R. Squibb & Sons, Inc.,** a division of **Olin Mathieson Chemical Corp.**

T. Pingolt has been appointed transportation manager of Olin's Brass Division. His headquarters will be in the division's offices at East Alton, Ill. Mr. Ingolt had been assistant transportation manager of Olin's Aluminum Division, New York, N.Y.

Keith Ramsden has been promoted to eastern traffic manager for **International Salt Co.**

Frank Hubert, Jr., district traffic manager for **Bethlehem Steel Corp.** at San Francisco, retires July 31 after 27 years of service.

Frederick E. Lord, Jr., has joined **Lord Manufacturing Co.,** a division of **Lord Corp.,** as manager of the materials department. In this post he is responsible for administration of traffic, production control and inventory control operations.

W. Lennig Travis has been named traffic manager, Atlantic Division, **Atlantic Richfield Co.,** to succeed **Robert Maguire,** retiring after 40 years of service with the company. Mr. Travis had been traffic manager of the division since 1958. Mr. Maguire, a past president of the National Freight Traffic Association, is a former treasurer of the National Industrial Traffic League.

SUPPLY TRADE

V. A. Middleton
Union Tank

R. E. Lynch
Union Tank

Vincent A. Middleton has been named sales representative, Midwest District, **Tank Car Division, Union Tank Car Co.,** with headquarters at Chicago. He was sales manager, **Seatrain Lines, Inc.,** Houston. **Robert E. Lynch** has been appointed Southwest District sales representative. Mr. Lynch, formerly supervisor, industrial railroad and chemical tank car fleet operations, **Tennessee Copper Co.,** Copperhill, Tenn., will have headquarters at Houston.

DIVIDENDS DECLARED

ALLEGHENY & WESTERN.—$3, semiannual, paid July 1 to holders of record June 16.

ATCHISON, TOPEKA & SANTA FE.—40¢, quarterly, payable Sept. 1 to holders of record July 28.

BEECH CREEK.—50¢, quarterly, paid July 1 to holders of record June 15.

CANADA SOUTHERN.—$1.50, semiannual, payable Aug. 1 to holders of record July 14.

CANADIAN PACIFIC.—$1.45, payable Aug. 1 to holders of record June 23; 2% on the preference stock, also payable Aug. 1 to holders of record June 23.

DELAWARE & HUDSON.—40¢, quarterly, paid June 28 to holders of record June 12.

MAHONING COAL.—$15, quarterly, paid July 3 to holders of record June 23; 2½%, semiannual, on the preferred stock, paid July 1 to holders of record June 23.

NEW YORK CENTRAL.—78¢, quarterly, paid July 14 to holders of record June 20.

NORTHERN CENTRAL.—$2, semiannual, paid July 17 to holders of record June 3.

PENNSYLVANIA.—60¢, quarterly, payable Sept. 8 to holders of record July 31.

PITTSBURGH & LAKE ERIE.—$1.50, quarterly, paid July 17 to holders of record June 30.

PITTSBURGH & WEST VIRGINIA.—4¢, monthly, paid July 28 to holders of record July 14; 5¢, monthly, payable Aug. 31 to holders of record Aug. 15.

PITTSBURGH, FT WAYNE & CHICAGO.—preferred, $1.75, quarterly, paid July 5 to holders of record June 9.

WESTERN MARYLAND.—40¢, quarterly, paid June 29 to holders of record June 22.

WESTERN PACIFIC.—55¢, quarterly, payable Aug. 15 to holders of record Aug. 1.

WHEELING & LAKE ERIE.—$1.43¾, quarterly, payable Aug. 7 to holders of record July 7.

XTRA ADDS 72 MILES OF PIGGYBACK EQUIPMENT TO YOUR FLEET!

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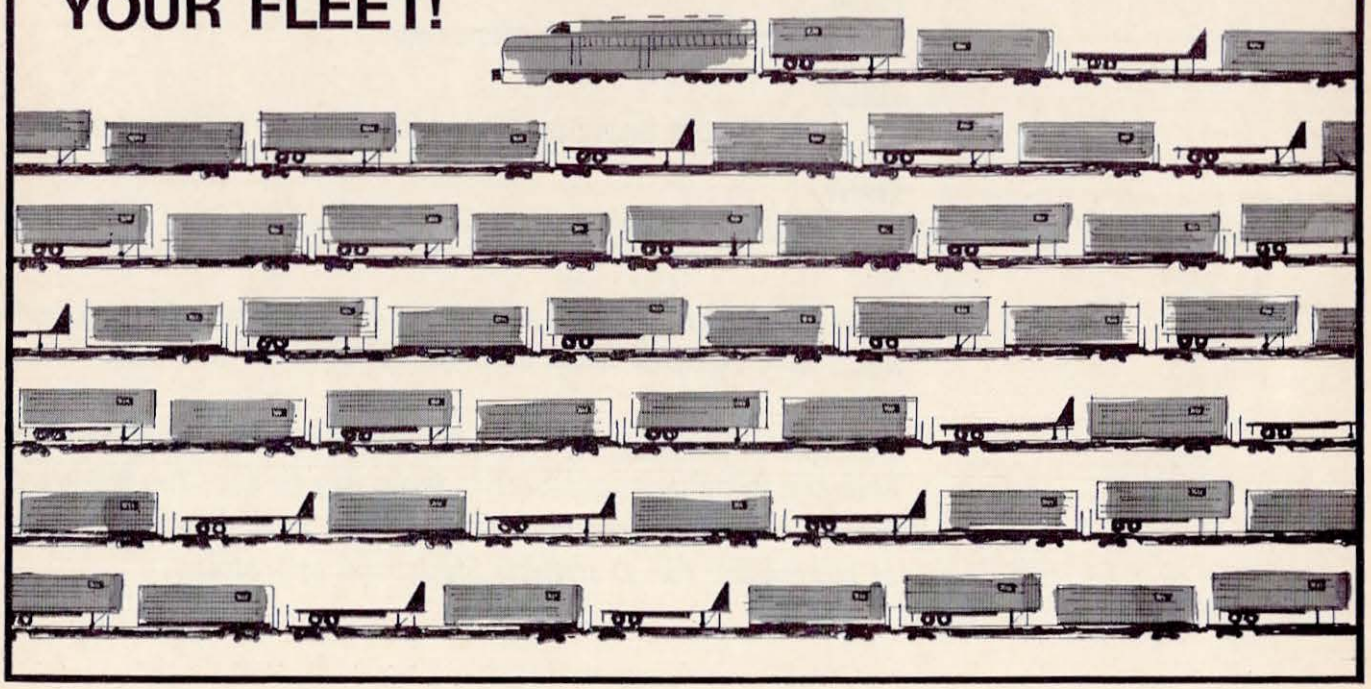

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WATCHING **WASHINGTON**

THE LONG HOT SUMMERS in Washington tend to have an enervating effect on general legislative activity in and around the halls of Congress. But this week, in the air-conditioned confines of Room 5110, New Senate Office Building, there will be a stir of activity that involves the railroads. Beginning on July 31——and continuing for three full days—will be hearings on four legislative proposals relating to rail passenger service and other railroad matters. The sessions have been scheduled by the Surface Transportation Subcommittee of the Senate Committe on Commerce headed by Washington Democrat Sen. Warren G. Magnuson.

THE CALENDAR for the hearings lists two bills plus a Senate concurrent resolution and a Senate joint resolution, a fairly ambitious amount of work for the summer doldrums by anyone's book. The hearings, to be presided over by Sen. Frank J. Lausche (D.—Ohio) chairman of the subcommittee, had originally been scheduled for mid-June but were postponed until this week. Up for consideration are:

—S.512, which would amend Section 13a of the Interstate Commerce Act and require the ICC to give full consideration to all financial assistance available before permitting any future passenger train offs;

—S.1685, also an amendment to Section 13a, to tighten ICC procedures to handle both passenger train and ferry discontinuances;

—Senate joint resolution 52, to direct the Secretary of Transportation to prepare within a year a master ground transportation plan. It would prohibit during the year and for 60 days thereafter ICC approval of any passenger train discontinuance, or, without approval of all states affected, change in service and any railroad consolidation, unification or merger.

—Senate joint resolution 52, to direct the Secretary sense of Congress that the Secretary of Transportation investigate and study the potential of rail passenger and mail transportation. (Pending completion of the study, the ICC would be expected to put pressure on the railroads to halt any more passenger train discontinuances, and the Postmaster General would be required to keep in effect all existing arrangements with the railroads for mail service.)

THE SPONSOR of the Senate concurrent resolution, Senate Gordon Allott (R. — Colo.) has taken the role of the Minute Man himself in warning the Postmaster General to de-escalate the war against passenger trains. "In view of the considerable bi-partisan co-sponsorship and the broad expression of interest nationally," he wired Postmaster General Lawrence O'Brien, "it would seem appropriate for the Post Office Department to cooperate by deferring such RPO cancellations as are practicable until action on S. Con. Res. 25 can be completed. The discontinuance of railway mail contracts contributes greatly to the discontinuance of passenger trains, and if the present trend goes unchecked, the whole question of rail passenger transportation may be academic."

Thus far there has been no response from the Postmaster General's office.

(Walter Taft is on vacation. In his absence this column is being written by other members of the staff.)

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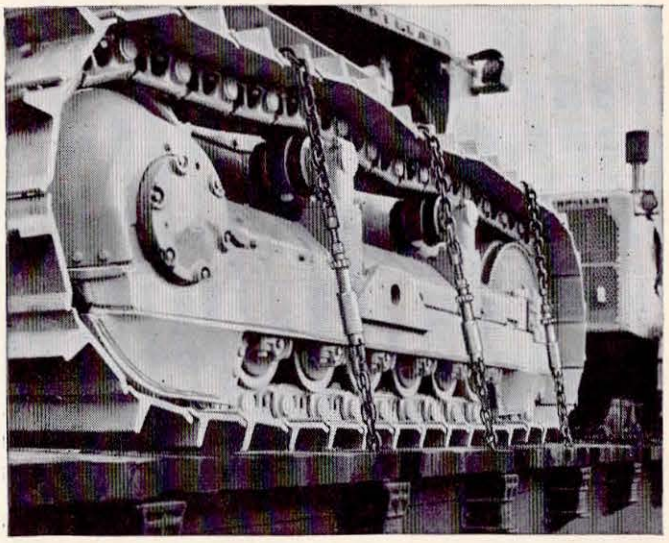

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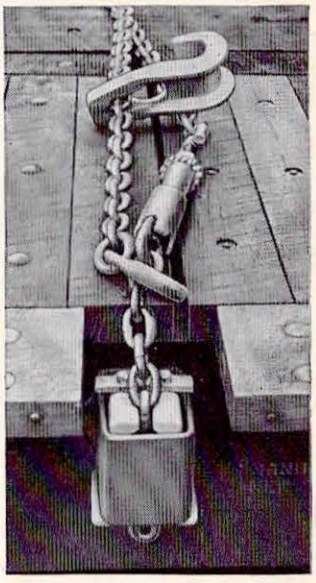

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MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended July 22 totaled 483,090 cars, the Association of American Railroads announced on July 27. This was a decrease of 47,000 cars, or 8.9%, compared with the previous week; a decrease of 89,445 cars, or 15.6%, compared with the corresponding week last year; and a decrease of 99,508 cars, or 17.1%, compared with the equivalent 1965 week. Ton-miles generated by carloadings in the week ended July 22 are estimated at 12.3 billion, a decrease of 12.6% below the corresponding week of 1966, and 10.4% below the 1965 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, July 22

District	1967	1966	1965
Eastern, including Allegheny and Pocohontas	185,024	219,169	236,563
Southern	102,174	110,454	108,367
Total Eastern and Southern Districts	287,198	329,623	344,930
Northwestern	71,109	90,208	88,586
Central Western	89,762	113,961	110,669
Southwestern	35,021	38,743	38,413
Total Western Districts	195,892	242,912	237,668
Total All Roads	483,090	572,535	582,598
Commodities:			
Grain and Grain products	47,372	63,992	55,179
Livestock	784	1,252	1,272
Coal	100,254	102,623	110,261
Coke	5,602	8,325	7,999
Forest Products	38,034	39,749	39,937
Ore	44,163	54,815	58,372
Merchandise l.c.l.	3,691	5,973	8,826
Miscellaneous	243,190	295,806	300,752
July 22	483,090	572,535	582,598
July 15	530,090	565,660	575,697
July 8	405,594	445,102	448,451
July 1	506,142	554,203	541,591
June 24	565,429	616,448	609,881
Cumulative total, 29 weeks	15,413,700	16,201,428	16,012,640
Estimated revenue ton-miles (billions) 29 weeks	399.3	406.9	378.4

PIGGYBACK CARLOADINGS.—U.S. piggyback loadings for the week ended Jul. 15 totaled 22,098 cars, carrying 35,909 trailers, compared with 21,179 cars, carrying 34,581 trailers, in the corresponding 1966 week. Loadings for 1967 up to Jul. 15 totaled 627,173 cars, carrying 1,031,472 trailers compared with 603,538 cars, carrying 996,068 trailers, in the corresponding period of 1966.

IN CANADA.—Canadian carloadings for the period ended July 9 were not available as this issue went to press.

FREIGHT TRAIN CARS

► *Bangor and Aroostook.*—Directors authorized acquisition of 100 jumbo end-rack pulpwood cars, at a cost of $1.7 million. The Board also authorized rebuilding of 100 40-ton box cars to 50-ton capacity to meet new traffic requirements. BAR President W. Jerome Strout said the acquisition of the new pulpwood cars would bring the road's ownership of that type of car to 818, making it the largest such fleet in New England.

► *Gulf, Mobile & Ohio.*—Ordered 102 rebuilt freight cars from Evans Products' United States Railway Equipment Co. subsidiary. Of the total order, 50 are 50-ft, 50-ton box cars equipped with DF-2 loaders; and 52 are 41-ft, 50-ton gondola cars.

► *Katy.*—Is acquiring 400 covered hopper cars, valued at $6 million, through an arrangement with C.I.T. Leasing Corp. First deliveries of the 100-ton cars will be made this month by Thrall Car. Deliveries will be completed in August. The lease agreement is one of the largest in rail equipment to be made by C.I.T. under its recently expanded transportation leasing program. A subsidiary of C.I.T. Financial Corp., the company also leases commercial and private jet aircraft, electronic data processing equipment, machinery, and other industrial apparatus.

► *Louisville & Nashville.*—Directors authorized expenditure of $34.7 million for the purchase of 2,100 new freight cars (1,600 80-ton, open-top hoppers, and 500 70-ton box cars) and the rebuilding of 1,800 cars. The rebuilding program will include conversion of 1,000 hopper cars from 50-ton to 60-ton capacity and reconstruction of 600 40-ft box cars. Also included is the building of 100 cabooses and 100 maintenance of way cars. This work will be done at L&N's South Louisville shops. Builders of the new cars have not been announced.

► *Norfolk & Western.*—Directors authorized building of 2000 100-ton-capacity coal hopper cars at a cost of $21.5 million. Construction will begin in the Roanoke, Va., shops in October and continue through April 1968.

► *Santa Fe.*—Ordered 200 70-ton 89-ft dual purpose trailer/container flat cars from General American at a cost of $3.5 million. Cars are scheduled for delivery beginning in September.

LOCOMOTIVE

► *Louisville & Nashville.*—Will purchase 33 new diesel-electric locomotives—25 four-axle and eight six-axle—at a total cost of more than $5.5 million. Builders have not been specified.

NEW FACILITIES

► *Kansas City Terminal.*—Authorized expenditure of $4.6 million for consolidation of 11 interlocking plants and for track changes. Wabco's Signal & Communications Div. will design circuits, supply equipment and make installations and track changes. Kerite Co. will supply wire and cable. Engineering work now is under way for the three-year project, for which 12 tenant railroads will share expenses.

YOU OUGHT TO KNOW

Green light for Jersey cars: The State of New Jersey gave the final go-ahead on the long-awaited order of 35 cars for lease to the Pennsylvania. The order is with General Steel Industries for 85-ft air-conditioned stainless steel cars, with a seating capacity of 120 each. Delivery is due in 1968, and the PRR will use them in north Jersey suburban operations.

Worthington to merge: The board of directors of Worthington Corp. approved merger terms already agreed to by Studebaker Corp. directors. If approved by stockholders, the combined firm will be named Studebaker-Worthington and produce annual sales on the order of $725 million.

German licensee for Trailmobile: Trailmobile Division of Pullman, Inc., has signed a licensing agreement with M.A.N. (Maschinenfabrik Augsburg-Nurenberg A.G.), granting M.A.N. exclusive rights to manufacture Trailmobile products in Germany. Trailmobile, which builds truck trailers and containers, has previously signed similar licensing agreements with manufacturers in the United Kingdom, Italy, Sweden, Australia, Japan, Spain and Argentina, besides operating two wholly-owned subsidiaries in Canada and Mexico.

New officers for CPCOA: R. M. Walker, president of Howell Forwarding Quebec, Ltd., has been elected president of the Canadian Pool Car Operators Association. Walker, who entered the merchandise pooling and forwarding business with Howell Forwarding in 1936, served as chairman of the Quebec Division of the Canadian Industrial Traffic League in 1963. Thomas B. Morrison has been appointed executive secretary of the CPCOA, with headquarters in Montreal. Morrison, until his recent appointment, had been manager-International Division of Quinn Freight Lines.

May safety report: Two railroad passengers were killed and 49 were injured in train and train-service accidents in May, compared with two killed and 90 injured in May 1966, according to a preliminary report issued by the Federal Railroad Administration. There were 16 employee fatalities and 1,371 injuries in May, compared with six fatalities and 1,480 injuries in May 1966. In grade-crossing accidents, 125 persons were killed and 269 injured in May of this year, compared with 113 killed and 287 injured in May 1966.

Container licensee named: The Weyerhaeuser Co., which this year began marketing standardized plywood-fiberglass containers, has announced that C. Itoh & Co. Ltd. of Japan will be the first foreign licensee to produce and sell the containers, in Japan and throughout the world. Weyerhaeuser will provide the know-how and specifications, along with initial engineering help. The company will also be a source of supply for materials in the U.S. A spokesman said Weyerhaeuser entered the licensing agreement because "several Japanese carriers have announced they will convert to containerization, and because of the world-wide interest in the container shipping method, which has now been standardized around the globe and is pegged as a billion-dollar industry."

AMSTED'S rail sales drop: Reduced freight-car purchases caused a substantial drop in rail-products sales in the quarter ended June 30, AMSTED Industries, Inc., reports. Joseph B. Lanterman, president, says the reductions will "adversely affect" fourth (fiscal) quarter operations, and "net income for the entire year will be less than 1966 but should be the second highest in the company's history." First nine-months' net was $10,386,000, or $3.80 per share, compared with $10,506,000, or $3.83 per share in the same year-ago period. Sales totaled $168,745,000, compared with $150,478,000 a year ago.

Truck tonnage: Intercity truck tonnage in the week ended July 15 was 19.3% above the previous holiday week and 6.2% below the volume in the corresponding week of 1966, according to American Trucking Associations.

Current statistics

Net Income	
3 mos., 1967	$120,000,000
3 mos., 1966	172,000,000
Carloadings, revenue freight	
29 wks., 1967	15,413,700
29 wks., 1966	16,201,428
Freight cars on order	
June 1, 1967	32,493
June 1, 1966	61,229
Freight cars delivered	
5 mos., 1967	39,129
5 mos., 1966	36,743
Serviceable cars	
June 1, 1967	1,419,210
June 1, 1966	1,412,244

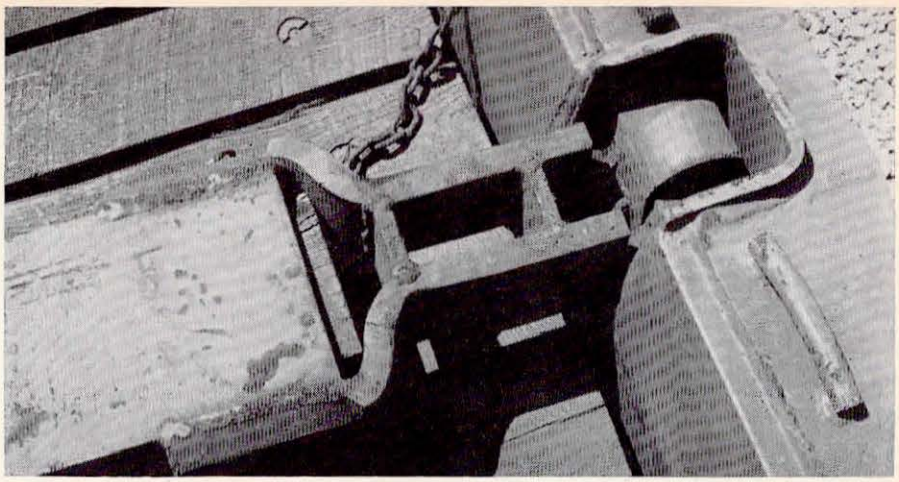
New system protects long pipe

A system that reduces loading and in-transit damage to long lengths of pipe being shipped on flat cars has been developed by the United States Steel Corp.

Called "Perma-Stake" because it utilizes permanent hinged stakes to hold pipe in place, the system has now been installed on extra-long flats to protect 65- to 80-ft lengths of pipe.

The system was originally developed and patented by U.S. Steel's Geneva Works at Provo, Utah, to secure pipe on 40- and 53-ft flat cars. Its adaptation to 85-ft cars was undertaken to permit shipment of new electric resistance weld pipe produced in 80-ft lengths at Geneva and McKeesport, Pa.

Prior to using the extra-long flat car system, long pipe loads extended beyond one or both ends of cars. "Idler" cars were needed for the overhang, with resulting waste of space and rolling stock.



HINGED STAKES hold pipe; fold down toward center when the car is empty.

With "Perma-Stake," up to eight stakes may be placed along each side of an 85-ft car. The stakes, made of steel channels, extend vertically approximately eight feet above the car bed. Wood liners permit a snug fit, and protect the pipe during shipment.

The 250-lb stakes have special hinges that permit them to be lowered after a car is unloaded. The stakes are set in special pockets (see illustration) welded to the rub rails on the cars. Each stake is secured to the car by a retainer pin inserted through the pocket and stake. The stakes are designed so they must be lifted clear of the pocket before they disengage.

At destination, if the pipe is unloaded by crane, the stakes are left in an upright position and the pipe is lifted over them. If a fork-lift unloads the pipe, it can be lifted in layers to clear the stakes. In either unloading procedure, when a car is emptied the stakes are folded down toward the center of the car. Dunnage used to separate pipe rows is laid beneath the stakes for the return trip. ■

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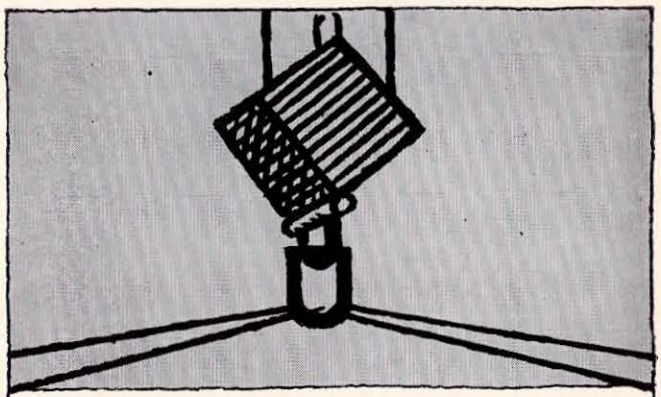

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VIEWPOINT

Incongruous days in Congress

WASHINGTON — The House Appropriations Committee today put up $197 million to help airlines go supersonic, but denied $3.5 million to help railroads haul motorists piggyback . . . .

The report that clattered out over the teletypes of United Press International on July 13 was not entirely accurate. Actually, the House Appropriations Committee approved $142 million to speed along U.S. entries in the supersonic race plus $99 million carried over from the fiscal 1967 budget.

But that bit about $3.5 million being hacked from the Department of Transportation's train-auto-ferry project was all too true. And it was all done in the pious name of fiscal responsibility.

"The Committee fails to understand why the Federal government should finance a project of this nature during this period of high federal deficits," grumbled the Committee. "If the project is economically feasible, there is no reason why private industry cannot proceed with it."

The Committee, it seems to us, fails to understand a lot.

Since Railway Age may fairly be presumed to take a prejudiced viewpoint in these matters, we are happy to let the Knoxville (Tenn.) News-Sentinel, a highly respected member of the Scripps-Howard family of newspapers, grind our axe.

In an editorial headed "Planes, Trains and Taxpayers," the News-Sentinel commented:

"The committee said the supersonic plane was needed for U.S. prestige, that foreign supersonic projects are being financed by tax money, that government financing here was necessary to preserve the health of a 'major' industry—the airlines. . . .

"The 'auto-on-train' project, of course, may not be practical. But then, as the committee said, the supersonic program is full of 'uncertainties'—uncertainties as to construction, uncertainties as to economic feasibility, uncertainties about solving the sonic boom problem.

"Nevertheless, as the House Appropriations Committee sees it, it is necessary in the next year to spend $241 million in tax money on the supersonic plane, but foolish to put out $3.5 million on a project which might help 'preserve' another major industry, the railroads.

"Just in passing, it also can be noted that altogether the bill appropriates $866.3 million for the Federal Aviation Administration, which runs airline traffic control, carries on aviation research and helps pay for local airports. The Federal Railroad Administration, charged with helping get the railroads modernized, was given $14.5 million."

That "just in passing" paragraph is, of course, the most important of all. We can live, probably, without a train-auto-ferry.

But can we live with the kind of government-by-favoritism that brought about the "Summary of Appropriations" reproduced below?

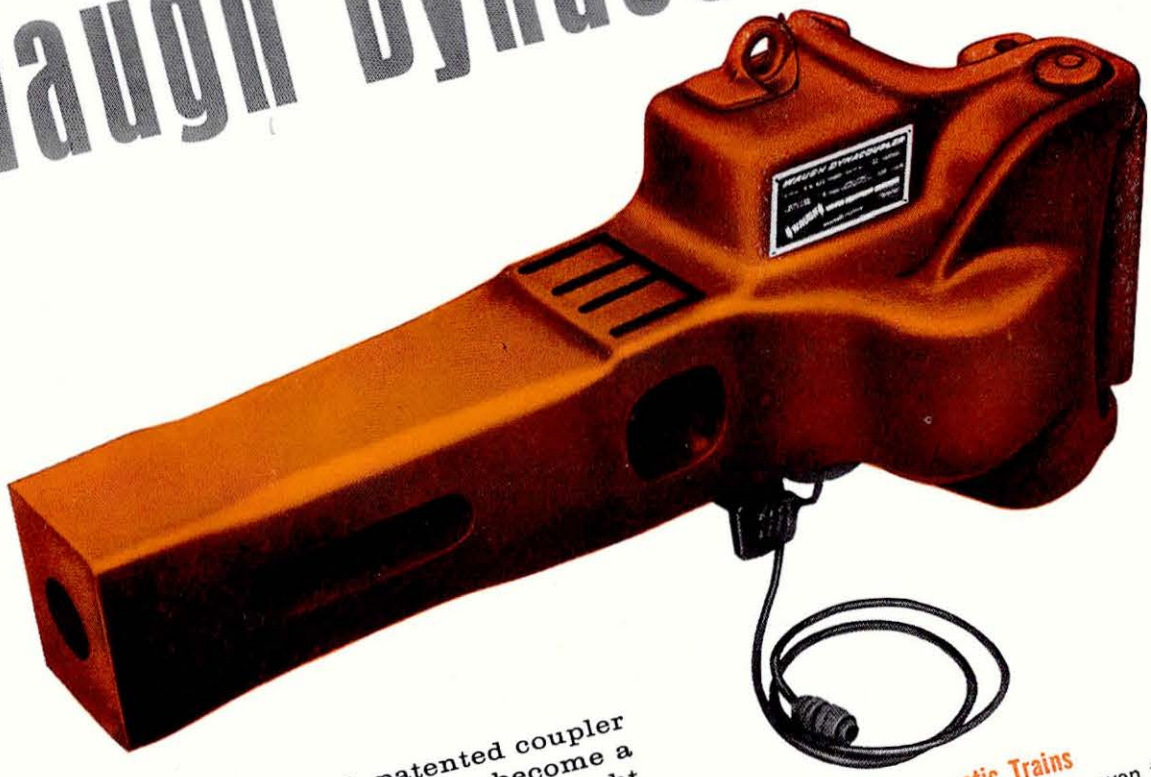
Railroad men owe it to themselves—and to their industry—to see to it that our high-flying Congressmen get the message.

SUMMARY OF APPROPRIATIONS

Title	Appropriations Fiscal Year 1967	Budget estimates fiscal year 1968	Recommended in Bill	BILL COMPARED WITH Appropriations Fiscal Year 1967	BILL COMPARED WITH Budget estimates, fiscal year 1968
Title I, Office of the Secretary ..	$3,000,000	$16,400,000	$12,935,100	+$9,935,100	−$3,464,900
Title II, Coast Guard	498,681,000	524,246,000	519,306,500	+20,625,500	−4,939,500
Title III, Federal Aviation Administration	988,026,500	942,960,000	866,361,000	−121,665,500	−76,599,000
Title IV, Federal Highway Administration	209,610,000	207,662,772	113,001,772	−96,608,228	−94,661,000
Title V, Federal Railroad Administration	22,000,000	23,050,000	14,594,000	−7,406,000	−8,456,000
Title VI, Other Activities	.....	4,300,000	4,000,000	+4,000,000	−300,000
Grand total, all titles	1,721,317,500	1,718,618,772	1,530,198,372	−191,119,128	−188,420,400

Rx for R&D...

Waugh Dynacoupler®



Here's the Waugh-patented coupler dynamometer which has become a basic tool for impact testing of freight equipment. It has been an essential element of present-day test specifications which led to the development of sophisticated cushioning devices.

How the Dynacoupler Works

Buffing and draft forces are transformed into electrical signals read directly on a meter or recorded on an oscillographic chart. Integrally cast behind the head is a solid "H" section equipped with strain gauges in two series parallel groups of equal resistance. Groups are connected in opposite legs of a Wheatstone bridge circuit producing a single output. The other two legs of the bridge circuit consist of single gauges attached to the coupler. Readings are constant and reliable, unaffected by out-of-line couplers or loads which are not axial. Available with E, F or H heads and numerous shanks.

Future Uses, and Automatic Trains

The Waugh Dynacoupler is ideal for even the most advanced of railroad research and development programs. One practical application is in automatic trains for the continual measurement of forces. Load variations resulting from grades and other forces will be transmitted by the Dynacoupler, actuating control mechanisms. These, in turn, would engage circuits to control locomotive power to suit the demand, or perform other useful functions.

For technical details, contact Waugh Equipment Company, 332 S. Michigan Avenue, Chicago, Illinois 60604. Other sales offices in New York, Philadelphia, Roanoke, St. Louis, San Francisco and Montreal.

If it rolls on rails . . .

WAUGH

. . . it should be cushioned by Waugh

SYMINGTON WAYNE TRANSPORTATION EQUIPMENT

WAUGH EQUIPMENT COMPANY
Subsidiary of Symington Wayne Corporation

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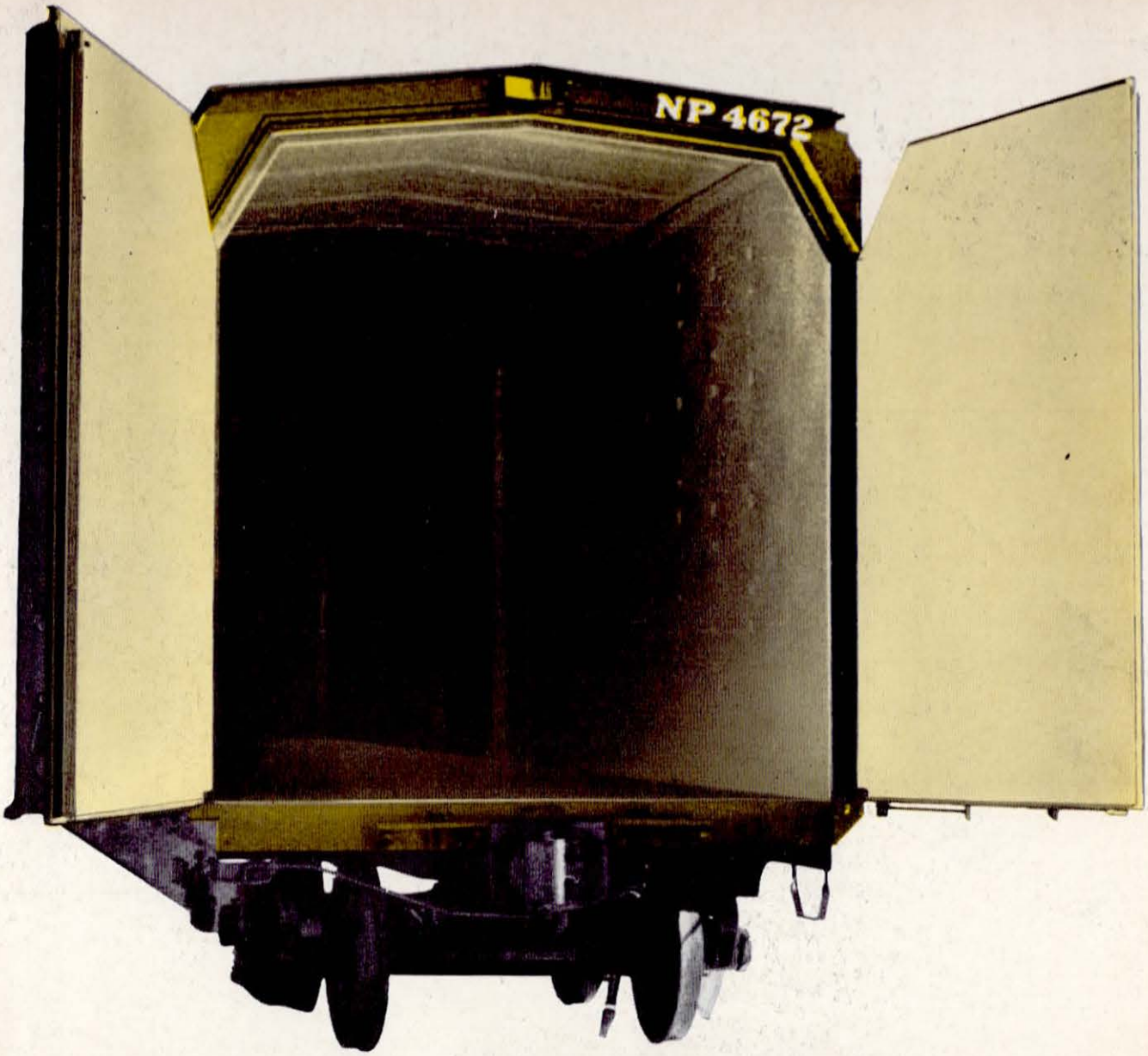

International Steel presents another innovation from its Railway Division's *Product Development Center:*

END DOORS in box cars

Disciplined design supervised the development of each element of this car—a new concept born of the renewed requirement for end doors in box cars. It has been designed and engineered under International's policy which dictates adherence—as closely as possible—to *multi*-purpose use, rather than the limited use of *special* purpose cars.

This meant that the design criteria imposed abnormal dynamic stress and maximum rigidity in both vertical and horizontal sections with a minimum of weight.

Structural rigidity has been engineered into the frame, supporting corner posts and header panel as well as door sections. Welding has been used throughout.

"still 10 years ahead in functional design"

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